Table of Contents

About This Bulletin .......................................................................................................................... 6
About DU ............................................................................................................................................. 7
  Equal Opportunity and Non-Discrimination Policy ................................................................. 7
  Accreditation ................................................................................................................................. 7
  Authorization and Disclosure .................................................................................................... 8
    Student Complaint State Contacts ....................................................................................... 8
University Governance and Organization .................................................................................... 18
Academic Calendar .......................................................................................................................... 19
  Attendance ............................................................................................................................... 20
  Final Exams ............................................................................................................................. 20
  Bereavement Policy .................................................................................................................. 20
  Campus Weather Closures ...................................................................................................... 21
  Religious Accommodations and Class Attendance .............................................................. 21
  Colorado Women's College Academic Calendar ................................................................. 21
  Traditional Bachelor's Program Academic Calendar ............................................................ 21
  University College Bachelor of Arts Completion Program Academic Calendar ............... 22
  Unit of Credit ............................................................................................................................ 23
Undergraduate Degree Programs and Requirements ............................................................... 24
  Degrees and Programs of Study ............................................................................................. 24
  Colorado Women's College ...................................................................................................... 29
    Admission ............................................................................................................................. 29
    Degrees and Degree Requirements ....................................................................................... 29
      Bachelor of Arts .................................................................................................................. 29
      Bachelor of Business Administration ................................................................................ 29
  Traditional Bachelor's Program ............................................................................................... 29
    Admission ............................................................................................................................. 29
      Readmitted Students ............................................................................................................. 32
      Second Baccalaureate Degrees ........................................................................................... 32
      Special Status ..................................................................................................................... 32
      Visiting Summer Students .................................................................................................. 32
    Degrees and Degree Requirements ....................................................................................... 32
      Bachelor of Arts .................................................................................................................. 38
      BFA Degree Requirements ............................................................................................... 38
      Bachelor of Music ............................................................................................................... 39
      Bachelor of Science ............................................................................................................ 40
      BSAcc Degree Requirements ............................................................................................. 41
      BSBA Degree Requirements ............................................................................................. 43
      BSCh Degree Requirements ............................................................................................. 46
      BScpE Degree Requirements ............................................................................................. 47
Academic Advising for Traditional Programs ................................................................. 392
First-Year Seminar Program ......................................................................................... 392
Business & International Studies Advising ................................................................. 392
Pre-Professional Programs ......................................................................................... 393
University College Advising ...................................................................................... 393
Degree Audit ............................................................................................................. 394
Registration .............................................................................................................. 395
Registration Access .................................................................................................. 395
Course Registration .................................................................................................. 396
Course Information .................................................................................................. 398
Immunizations and Health Insurance Requirements .................................................. 401
Tuition and Fees and Financial Aid ............................................................................ 402
Tuition and Fees ....................................................................................................... 402
Tuition Refund ......................................................................................................... 403
Financial Aid ........................................................................................................... 403
Academic Standards and Grading ............................................................................. 408
Procedure for Grade Appeals .................................................................................... 410
Exceptions to Academic Policy ................................................................................ 411
Academic Support ..................................................................................................... 412
Center for Community Engagement and Service Learning ....................................... 414
Study Abroad ........................................................................................................... 415
Undergraduate Research Center .............................................................................. 416
Other Academic Opportunities ................................................................................ 417
Student Life .............................................................................................................. 420
Student Conduct ...................................................................................................... 421
Honor Code .............................................................................................................. 421
Academic Misconduct ............................................................................................... 421
Smoke-Free Policy ................................................................................................... 422
Student Information and Records ........................................................................... 423
Critical Incident Notification Systems ...................................................................... 423
Educational Records Rights and Privacy ................................................................. 423
Emergency Contacts ............................................................................................... 425
Transcripts ................................................................................................................. 425
Leave of Absence and Withdrawal from the University .............................................. 427
Official Withdrawal .................................................................................................. 427
Unofficial Withdrawal ............................................................................................... 427
Medical Leave of Absence ....................................................................................... 428
Students Called for Military Duty ............................................................................ 430
Readmitted Students ............................................................................................... 430
Graduation Policies .................................................................................................. 432
Commencement ....................................................................................................... 432
Diplomas .................................................................................................................. 432
About This Bulletin

About this Bulletin

The University of Denver Undergraduate Bulletin has been prepared by the faculty and administration to serve as the governing document for University's undergraduate academic programs, courses and policies. The Undergraduate Bulletin represents the University's best planning at the time of publication. Course and curriculum changes; modification to tuition, fees or other charges; and unforeseen changes in other aspects of the University of Denver sometimes occur after the bulletin has been published, but before the changes can be incorporated in a later edition and apply to all students as of the date they become effective, regardless of whether they were in effect at the time the student initially enrolled at the University of Denver. Students are responsible for knowing all academic and administrative policies and regulations affecting their program of study and for abiding by all such policies and regulations during their period of enrollment at the University. The Undergraduate Bulletin does not constitute a contract between the University of Denver and its students on either a collective or individual basis.
About DU

The University of Denver

Founded in 1864, the University of Denver is an independent coeducational institution located in a residential neighborhood eight miles southeast of downtown Denver. Colleges, schools and divisions of the University include the following:

- Colorado Women's College
- Daniel Felix Ritchie School of Engineering and Computer Science
- Daniels College of Business
- Divisions of Arts, Humanities and Social Sciences
- Division of Natural Sciences and Mathematics
- Josef Korbel School of International Studies
- Graduate School of Professional Psychology
- Graduate School of Social Work
- Morgridge College of Education
- Sturm College of Law
- University College

Students

University of Denver students come from all 50 states, in addition to the District of Columbia and from several U.S. territories, and from 87 different countries. Enrollment is approximately 11,800: 5,600 undergraduates and 6,200 graduate students.

Equal Opportunity and Non-Discrimination Policy

The University of Denver is an Equal Opportunity Institution. It is the policy of the University not to discriminate in the admission of students, in the provision of services, or in employment on the basis of race, ethnicity, color, religion, sex, national origin, age, marital status, veteran status, sexual orientation, gender identity, gender expression, genetic information, or disability. The University prohibits all discrimination, harassment and retaliation, and complies with all applicable federal, state and local laws, regulations and Executive Orders.

Inquiries concerning allegations of discrimination based on any of the above factors may be referred to the Office of Equal Opportunity:

University of Denver
Office of Equal Opportunity
Mary Reed Building, Room 422
2199 S. University Blvd.
Denver, CO 80208
Phone: 303-871-7436
Fax: 303-871-3656

For more information, please call the above number or see the website at http://www.du.edu/deo/. You also may contact the Office of Equal Opportunity with concerns regarding determinations of religious or disability accommodations and/or issues about access.

Accreditation

Institutional Accreditation

The University of Denver is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools, one of six regional accrediting bodies recognized by the U.S. Department of Education. DU is authorized to offer post-secondary education in the state of Colorado by the Colorado Department of Higher Education.

Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604-1413
312-263-0456
800-621-7440
www.ncahlc.org (http://www.ncahlc.org)

Colorado Department of Higher Education
1560 Broadway, Suite 1600
Specialized Accreditation

Individual academic programs undergo periodic review by accreditation or certification bodies in their field.

- Accrediting Board for Engineering and Technology
- American Bar Association
- American Chemical Society
- American Library Association
- American Psychological Association
- Association to Advance Collegiate Schools of Business International
- Colorado Department of Education
- Council on Social Work Education
- National Association of Schools of Arts and Design
- National Association of School Psychologists
- National Association of Schools of Music

Authorization and Disclosure

In October 2010, the Federal Department of Education issued “Program Integrity” regulations that require all Title IV eligible schools to obtain approval to operate in every state in which a student is located while receiving instruction. This is true for all educational programs, including distance education.

If an institution is offering postsecondary education through distance or correspondence education in a state in which it is not physically located, the institution must meet any state requirements for it to be legally offering distance or correspondence education in that state.

In order to offer online educational opportunities to other states’ residents, DU must comply with those states’ policies for distance education and be able to demonstrate compliance upon request.

The University of Denver works to ensure authorization to offer educational programs to students residing in all U.S. states and territories.

The University of Denver is approved to operate in most U.S. states either through licensure, registration, general or specific approvals, consent or exemption.

Please direct questions about state authorization to the Office of the Registrar (http://www.du.edu/registrar).

Registration Disclosures

Maryland

The University of Denver is a registered institution with the Maryland Higher Education Commission.

Student Complaint State Contacts

This list includes contact information for all 50 states, the District of Columbia and Puerto Rico and should not be construed as informative of what agencies regulate the institution or in what states the institution is licensed or required to be licensed. States, through the relevant agencies or Attorneys General Offices, may accept complaints regardless of whether the institution is required to be licensed in that state.

ALABAMA

Alabama Commission on Higher Education
P. O. Box 302000
Montgomery, AL 36130-2000

ALASKA

Alaska Commission on Postsecondary Education
PO Box 110505
Juneau, AK 99811-0505
customer.service@alaska.gov

Alaska Office of Attorney General
Consumer Protection Unit  
1031 W. Fourth Avenue, Suite 200  
Anchorage, AK 99501  
attorney.general@alaska.gov  
http://www.law.state.ak.us/pdf/consumer/FORM_complaint.pdf

ARIZONA  
Arizona State Board for Private Postsecondary Education  
1400 W. Washington Street  
Room 260  
Phoenix, AZ 85007  
https://ppse.az.gov/complaint

ARKANSAS  
Arkansas Higher Education Coordinating Board  
Arkansas Department of Higher Education  
114 East Capitol Ave  
Little Rock, AR 72201  
ADHE_info@adhe.edu  

Arkansas State Board of Private Career Education  
501 Woodlane, Suite 312S  
Little Rock, AR 72201  
sbpce@arkansas.gov  
http://sbpce.arkansas.gov/students/Pages/complaintProcess.aspx

CALIFORNIA  
California Bureau of Private Postsecondary Education  
P.O. Box 980818  
W. Sacramento, CA 95798-0818  
bppe@dca.ca.gov  
http://www.bppe.ca.gov/forms_pubs/complaint.pdf

COLORADO  
Colorado Department of Higher Education  
1560 Broadway, Suite 1600  
Denver, Colorado 80202  
http://highered.colorado.gov/Academics/Complaints/default.html

CONNECTICUT  
Connecticut Department of Higher Education  
61 Woodland Street  
Hartford, CT 06105-2326  
info@ctdhe.org

Connecticut Department of Consumer Protection  
165 Capitol Avenue  
Room 110  
Hartford CT 06106  
trade.practices@ct.gov  

Consumer Complaint Hotline: 800-842-2649

DELAWARE  
Delaware Higher Education Office  
Carvel State Office Building, 5th Floor  
820 N. French Street  
Wilmington, DE 19801-3509  
dheo@doe.k12.de.us
Delaware Attorney General
Consumer Protection Wilmington:
820 N. French Street 5th floor
Wilmington, DE 19801
consumer.protection@state.de.us

DISTRICT OF COLUMBIA
District of Columbia Office of the State Superintendent of Education
Education Licensure Commission
810 First Street, NE
9th Floor
Washington, DC 20002
http://sheeo.org/sheeo_surveys/user/40

FLORIDA
Florida Commission on Independent Education
325 W. Gaines Street
Suite 1414
Tallahassee, FL 32399-0400
Commissioner@fldoe.org
http://www.fldoe.org/cie/complaint.asp

GEORGIA
Georgia Nonpublic Postsecondary Education Commission
2082 E Exchange Pl. #220
Tucker, GA 30084-5334
http://gnpec.org/MainMenu.asp

HAWAII
Hawaii State Board of Education
P.O. Box 2360
Honolulu, Hawaii 96804
ocp@dcca.hawaii.gov
http://hawaii.gov/dcca/ocp/consumer_complaint

IDAHO
Idaho State Board of Education
Attn: State Coordinator for Private Colleges and Proprietary Schools
650 West State Street
P.O. Box 83720
Boise, ID 83720-0037

ILLINOIS
Illinois Board of Higher Education
431 East Adams, 2nd Floor
Springfield, Illinois 62701-1404
info@ibhe.org
Institutional Complaint Hotline: (217) 557-7359

Illinois State Board of Education
100 N. 1st Street
Springfield, Illinois 62777
http://webprod1.isbe.net/contactisbe/ (email)

Illinois Attorney General
Consumer Fraud Bureau
500 South Second Street
Springfield, IL 62706
http://www.illinoisattorneygeneral.gov/consumers/
Consumer Fraud Hotline: 800-243-0618

**INDIANA**
Indiana Commission on Proprietary Education  
Attn: Director of Regulatory Compliance  
302 W Washington Street, Room E201  
Indianapolis, IN 46204  
http://www.in.gov/cpe/files/sf39280-complaint.pdf

**IOWA**
Iowa Student Aid Commission  
603 E. 12th Street, 5th Floor  
Des Moines, IA 50319  
info@iowacollegeaid.gov  
https://www.iowacollegeaid.gov/content/forms-and-applications

**KANSAS**
Kansas Board of Regents  
1000 SW Jackson Street  
Suite 520  
Topeka, KS 66612-1368  
http://www.kansasregents.org/academic_affairs/private_out_of_state/complaint_process

**KENTUCKY**
Kentucky Council on Postsecondary Education  
1024 Capital Center Dr #320  
Frankfort, KY 40601-7512  
Office of the Attorney General  
Capitol Suite 118  
700 Capitol Avenue  
Frankfort, Kentucky 40601-3449  
consumer.protection@ag.ky.gov  
http://ag.ky.gov/civil/consumerprotection/complaints/Pages/default.aspx

**LOUISIANA**
Louisiana Board of Regents  
P.O. Box 3677  
Baton Rouge, LA 70821-3677  
http://www.regentsfiles.org/assets/docs/ProprietarySchools/StudentComplaintProcedure.pdf

**MAINE**
Maine Department of Education  
Complaint Investigator  
23 State House Station  
Augusta, ME 04333-0023  
jonathan.braff@maine.gov  
Maine Attorney General  
Consumer Protection Division  
6 State House Station  
Augusta, ME 04333  

**MARYLAND**
Maryland Higher Education Commission  
839 Bestgate Road, Suite 400  
Annapolis, MD 21401-3013  
http://www.mhec.state.md.us/career/pcs/gripe.asp  
Maryland Attorney General
Consumer Protection Division
200 St. Paul Place
Baltimore, MD 21202
consumer@oag.state.md.us


Consumer Protection Hotline: (410) 528-8662

Filed complaints are subject to investigation by the Office of the Attorney General of the Maryland Higher Education Commission

MASSACHUSETTS
Massachusetts Board of Higher Education
One Ashburton Place
Room 1401
Boston, MA 02108
http://www.mass.edu/forstudents/complaints/complaintprocess.asp

MICHIGAN
Michigan Department of Labor & Economic Growth
Office of Postsecondary Services
Proprietary School Unit Staff
201 N. Washington Sq.
Lansing, MI 48913
http://www.michigan.gov/lara/0,4601,7-154-35299_61343_35395_35396-139958--,00.html

MINNESOTA
Minnesota Office of Higher Education
1450 Energy Park Drive, Suite 350
St. Paul, MN 55108-5227
http://www.ohe.state.mn.us/mPg.cfm?pageID=1078

MISSISSIPPI
Mississippi Commission on College Accreditation
3825 Ridgewood Road
Jackson, MS 39211-6453

Mississippi Commission of Proprietary Schools and College Registration
3825 Ridgewood Road
Jackson, MS 39211-6453

Consumer Protection Division
Office of the Attorney General
State of Mississippi
P.O. Box 22947
Jackson, Mississippi 39225-2947

MISSOURI
Missouri Department of Higher Education
205 Jefferson Street
P.O. Box 1469
Jefferson City, MO 65102-1469
info@dhe.mo.gov

MONTANA
Montana Board of Regents
Office of Commissioner of Higher Education
Montana University System
2500 Broadway Street
P.O. Box 203201
Helena, MT 59620-3201
Montana Office of Consumer Protection
2225 11th Avenue
P.O. Box 200151
Helena, MT 59620-0151
contactocp@mt.gov
https://doj.mt.gov/consumer/consumer-complaints/

NEBRASKA
Nebraska Coordinating Commission for Postsecondary Education
P.O. Box 95005
Lincoln, NE 68509-5005

Nebraska Department of Education
Investigations Office
301 Centennial Mall South
P.O. Box 98987
Lincoln, NE 68509-4987
http://www.education.ne.gov/PPCS/PDF%20Folders/PDF%20Documents/PPCS%20Forms/Complaint-form.pdf

Nebraska Attorney General
Consumer Protection Division
2115 State Capitol
Lincoln, NE 68509
http://www.ago.state.ne.us/consumer/emailforms/consumer_complaint.htm

Consumer Protection Hotline: 800-727-6432

NEVADA
Nevada Commission on Postsecondary Education
3663 East Sunset Road
Suite 202
Las Vegas, Nevada 89120
http://www.cpe.state.nv.us/CPE%20Complaint%20Info.htm

NEW HAMPSHIRE
New Hampshire Postsecondary Education Commission
3 Barrell Court #300
Concord, NH 03301-8531
http://www.nh.gov/postsecondary/complaints

NEW JERSEY
New Jersey Commission on Higher Education
P.O. Box 542
Trenton, NJ 08625
nj_che@che.state.nj.us

New Jersey Department of Labor and Workforce Development
1 John Fitch Plaza
P.O. Box 110
Trenton, NJ 08625-0110
schoolapprovalunit@dol.state.nj.us
http://lwd.dol.state.nj.us/labor/forms_pdfs/edtrain/Conflict%20Resolution%20Questionnaire.pdf

New Jersey Division of Consumer Affairs
124 Halsey Street Newark
New Jersey 07102

NEW MEXICO
New Mexico Higher Education Department
NEW YORK
New York Office of College and University Evaluation
New York State Education Department
5 North Mezzanine
Albany, NY 12234
ocueinfo@mail.nysed.gov
http://www.highered.nysed.gov/ocue/spr/COMPLAINTFORMINFO.html

New York Bureau of Proprietary School Supervision
New York State Education Department
99 Washington Avenue, Room 1613 OCP
Albany, New York 12234

New York State Department of State
Division of Consumer Protection
Consumer Assistance Unit
5 Empire State Plaza, Suite 2101
Albany, New York 12223-1556
https://www.dos.ny.gov/consumerprotection/form/complaintform.asp

NORTH CAROLINA
North Carolina Community College
System Office of Proprietary Schools
200 West Jones St.
Raleigh, North Carolina 27603
http://www.nccommunitycolleges.edu/complaint-procedures-and-forms

North Carolina Consumer Protection
Attorney General's Office
Mail Service Center 9001
Raleigh, NC 27699-9001
http://www.ncdoj.gov/getdoc/59be4357-41f3-4377-b10f-3e8bd532da5f/Complaint-Form.aspx

NORTH DAKOTA
North Dakota Department of Career and Technical Education
State Capitol, 15th Floor
600 E. Boulevard Ave. Dept. 270
Bismarck, ND 58505-0610
cte@nd.gov

North Dakota Consumer Protection Division
Office of Attorney General
Gateway Professional Center
1050 E Interstate Ave. Suite 200
Bismarck, ND 58503-5574
http://www.ag.state.nd.us/cpat/PDFFiles/SFN7418.pdf

OHIO
Ohio State Board of Career Colleges and Schools
35 East Gay Street, Suite 403 Columbus, OH 43215-3138
http://scr.ohio.gov/LinkClick.aspx?fileticket=%2bwaKHWPRAH8%3d&tabid=68

Ohio Board of Regents
30 East Broad Street, 36th floor
Columbus, OH 43215-3414

Ohio Attorney General
Consumer Protection Section
30 E. Broad St., 14th floor
Columbus, OH 43215-3400
http://www.ohioattorneygeneral.gov/consumercomplaint

OKLAHOMA
Oklahoma State Regents for Higher Education
655 Research Parkway, Suite 200
Oklahoma City, OK 73104

Oklahoma State Board of Private Vocational Schools
3700 Classen Boulevard Suite 250
Oklahoma City, OK 73118-2864

Oklahoma Office of the Attorney General
Consumer Protection Unit
Attn: Investigative Analyst
313 NE 21st Street
Oklahoma City, OK 73105
http://www.oag.state.ok.us/oagweb.nsf/ccomp.html

OREGON
Oregon Office of Degree Authorization
1500 Valley River Drive, Suite 100
Eugene, OR 97401

Oregon Department of Education
Private Career Schools Office
255 Capitol Street NE
Salem, OR 97310-0203
http://www.ode.state.or.us/teachlearn/specialty/pcs/forms/complaint-procedures.doc

Oregon Attorney General
Financial Fraud/Consumer Protection Section
1162 Court St. NE
Salem, OR 97301-4096
https://justice.oregon.gov/forms/consumer_complaint.asp

PENNSYLVANIA
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126-0333

Office of Attorney General
Bureau of Consumer Protection
14th Floor, Strawberry Square
Harrisburg, PA 17120
http://www.attorneygeneral.gov/uploadedFiles/Complaints/BCP_Complaint_Form.pdf

PUERTO RICO
Puerto Rico Council on Higher Education
P.O. Box 1900
San Juan, PR  00910-1900

Puerto Rico Department of Justice
P.O. Box 9020192
San Juan, Puerto Rico 00902-0192

RHODE ISLAND
Rhode Island Board of Governors for Higher Education
Shepard Building
80 Washington Street
Providence, RI 02903

Rhode Island Department of Attorney General
Consumer Protection Unit
150 South Main Street
Providence, RI 02903
http://www.riag.ri.gov/ConsumerProtection/About.php

SOUTH CAROLINA
South Carolina Commission on Higher Education
1333 Main Street, Suite 200
Columbia, SC 29201
http://www.che.sc.gov/CHE_Docs/AcademicAffairs/License/Complaint_procedures_and_form.pdf

SOUTH DAKOTA
South Dakota Board of Regents
306 E. Capitol Ave, Suite 200
Pierre, SD 57501-2545
South Dakota Office of Attorney General
Division of Consumer Protection
1302 E Hwy 14, Suite 3
Pierre, SD 57501-8053
http://atg.sd.gov/Consumers/HandlingComplaints/ConsumerComplaintForm.aspx

TENNESSEE
Tennessee Higher Education Commission
404 James Robertson Parkway, Suite 1900
Nashville, TN 37243
http://www.tn.gov/thec/Divisions/LRA/PostsecondaryAuth/Complaint%20Form.rtf

TEXAS
Texas Workforce Commission
Career Schools and Colleges, Room 226-T
101 East 15th Street
Austin, Texas 78778-0001
http://www.twc.state.tx.us/svcs/propschools/ps401a.pdf

Texas Higher Education Coordinating Board
1200 E. Anderson Lane
Austin, Texas 78752

Office of the Attorney General
Consumer Protection Division
P.O. Box 12548
Austin, TX 78711-2548
https://www.texasattorneygeneral.gov/cpd/file-a-consumer-complaint

UTAH
Utah Division of Consumer Protection
160 East 300 South
Salt Lake City, Utah 84111
consumerprotection@utah.gov
http://consumerprotection.utah.gov/complaints/index.html

VERMONT
Vermont Department of Education
State Board of Education
Vermont Department of Education
120 State Street
Montpelier, VT 05620-2501

VIRGINIA
State Council of Higher Education for Virginia
WASHINGTON

Washington Higher Education Coordinating Board
917 Lakeridge Way
P.O. Box 43430
Olympia, WA 98504-3430
dainfo@hecb.wa.gov

Washington Workforce Training and Education Coordinating Board
128 10th Avenue SW
P.O. Box 43105
Olympia, WA 98504-3105
workforce@wtb.wa.gov
http://www.wtb.wa.gov/PCS_Complaints.asp (instructions)

Washington State Office of the Attorney General
1125 Washington Street SE
P.O. Box 40100
Olympia, WA 98504-0100
https://fortress.wa.gov/atg/formhandler/ago/ComplaintForm.aspx (complaint form)

WEST VIRGINIA

West Virginia Higher Education Policy Commission
1018 Kanawha Blvd E., Ste 700
Charleston, WV 25301-2800

Community and Technical College System of West Virginia
1018 Kanawha Blvd. E., Ste. 700
Charleston, WV 25301

West Virginia Office of the Attorney General
Consumer Protection Division
P.O. Box 1789
Charleston, WV 25326-1789
http://www.wvago.gov/publicresource.cfm

WISCONSIN

Wisconsin Educational Approval Board
201 West Washington Avenue, 3rd Floor
Madison, WI 53703
608-266-1996
eabmail@eab.wisconsin.gov
http://eab.state.wi.us/resources/complaint.asp

WYOMING

Wyoming Department of Education
2300 Capitol Avenue
Hathaway Building, 2nd Floor
Cheyenne, WY 82002-0050

Attorney General's Office
123 Capitol Building
200 W. 24th Street
Cheyenne, WY 82002
University Governance and Organization

Administration
Rebecca Chopp, PhD
Chancellor

Gregg Kvistad, PhD
Provost and Executive Vice Chancellor

Nancy Allen, MLS
Dean, Penrose Library

E. LaBrent Chrite, PhD
Dean, Daniels College of Business

Christopher Hill, MS
Dean, Josef Korbel School of International Studies

J.B. Holston, MBA
Dean, Daniel Felix Ritchie School of Engineering and Computer Science

Martin J. Katz, JD
Dean, Sturm College of Law

Andrei Kutateladze, PhD
Dean, Division of Natural Sciences and Mathematics

Michael McGuire, MLS
Dean, University College

Daniel McIntosh, PhD
Dean, Divisions of Arts, Humanities and Social Sciences

Linda Grace Olson, PhD
Interim Dean, Colorado Women’s College

Karen S. Riley, PhD
Interim Dean, Morgridge College of Education

Shelly Smith-Acuña, PhD
Dean, Graduate School of Professional Psychology

James Herbert Williams, PhD
Dean, Graduate School of Social Work

Board of Trustees
Douglas G. Scrivner
Chair
Academic Calendar

Quarter System
The academic calendar is divided into fall, winter and spring quarters and a summer session. Each quarter is approximately ten weeks long and summer session is nine weeks. There are four interterm sessions. Students may complete degree requirements through continuous enrollment, including summers, or may arrange the normal work of a three-quarter academic year in any desirable sequence of quarters and summer session.

Summer Session
Summer session (http://www.du.edu/summer) is an avenue for continuing undergraduate and graduate students to accelerate their programs or complete necessary coursework. Elective, Common Curriculum and required courses for majors and minors are offered in a variety of time frames. Travel and other unique courses including short, intensive workshops are part of the summer program. Visiting students, professionals and individuals from the community interested in attending for the summer only are encouraged to attend and are admitted (http://bulletin.du.edu/undergraduate/undergraduateprograms/traditionalbachelorsprogram/admission/summer) under an open-enrollment policy.
Interterms
Interterms are the periods preceding each academic quarter, during which short, innovative on-campus and travel experiences for undergraduate and graduate students are offered. Hours completed in interterms are applied as credit toward graduation requirements and may be applied to the major or minor. Students register for interterm classes in the Special Programs Office (http://www.du.edu/specpro). Questions about interterms should be directed to the interterms office, Special Programs, Mary Reed Building, Room 301, 2199 S. University Blvd., Denver, CO 80208-2360, or by calling 303-871-2360.

Academic Calendars
Please consult the academic calendar for your program for information on orientation periods, the dates quarters begin and end and University holidays.

Traditional Bachelor's Program (p. 21)
University College Bachelor of Arts Completion Program (p. 22)

Attendance
Students are expected to attend all meetings of classes for which they are registered, including the first and last scheduled meetings and the final examination period. Students who fail to attend the first class and who have not previously notified their instructors of their absence may be withdrawn from the course by the Office of the Registrar in consultation with the instructor. Instructors have the right and responsibility to establish attendance policies for their courses.

Participation in official University activities, personal emergencies and religious observances are valid reasons for absences. Students are responsible for informing instructors about their absence and for completing assignments given during their absence. A student may not attend classes without being officially enrolled. Registrations are not processed after the designated registration period of the quarter.

Final Exams
Any final exam for a course must be scheduled during the final exam period. Each quarter, the Office of the Registrar posts the final exam schedule on its website at www.du.edu/registrar. Students must attend all final exams as scheduled by faculty. Students are expected to let their instructors know when they have more than one exam being held at the same time. The Office of the Registrar will attempt to resolve conflicts whenever possible. Final exams are not changed to accommodate student travel plans, and students should only plan travel after the official end date of the term.

Bereavement Policy
Policy
• Students will be excused from class for funeral leave in the event of the death of a member of the student’s immediate family or household for up to three work days for an in-state funeral and five work days for out-of-state.

Statement of support
In the unfortunate event that a student experiences a personal tragedy or trauma such as, for example, a death in the family or personal injury or harm, the University stands ready to assist and accommodate him or her in the aftermath. If a student should suffer the loss of a parent, guardian, sibling, spouse, roommate, or other person close to them, their associate provost has the authority to provide a number of special accommodations, and will be happy to review them with the affected student.

How to report
• If a student experiences a personal tragedy or trauma, he or she should notify (or have a roommate, friend, or family member notify) their associate provost’s office i.e., undergraduate students contact the associate provost for student life, and graduate/professional students contact the associate provost for graduate studies). The associate provost will see that instructors are contacted, and ask them to assist the student when ready and able to resume their studies. Their office will also gladly help access support resources in the local community, such as Counseling Services and the Religious Life staff, if that would be useful. Upon return to campus, the student should arrange to meet with the associate provost to discuss options and strategies for catching up with missed academic work and for completing the quarter/semester successfully.
• Faculty will be notified by: undergraduates: the executive director of academic advising; graduate/professional students: director of graduate student services.

Available options
Among the options available to assist students in tragic situations are the following (subject to current applicable policies):
• Withdrawal
• Load reductions
• Additional time to complete work (NB: excuse from class attendance is not an excuse from fulfilling course requirements, which must be fulfilled in a timely manner)
• Incompletes
• Official academic accommodations through the Disability Service Program (Accommodations may include extended time on tests, assistive technologies, note-taking, extensions on assignments, extra absences, etc.). The accommodations policy can be accessed at this website: http://www.du.edu/studentlife/disability/dsp/AcademicAccommodationsPolicy.pdf

Grievance/appeal process

If a student and course instructor cannot agree on an appropriate resolution to the absence, the student may bring the matter to the Department Chair for a decision. If there is still no agreement, the student may bring the matter to the appropriate Associate Provost, where a final decision will be made. Students who believe they have been discriminated against on the basis of religion by the denial of a requested bereavement accommodation may contact the Office of Diversity and Equal Opportunity to learn about filing a discrimination complaint.

Campus Weather Closures

Sometimes severe storms may create such a hazard that the University makes a decision to close and cancel operations for a period of time. Students can receive information about campus weather closures by registering for the Critical Incident Notification System (http://bulletin.du.edu/undergraduate/studentinformationandrecords/criticalincidentnotificationsystems). The University of Denver homepage will also be updated to reflect a closure due to severe weather.

Religious Accommodations and Class Attendance

University policy grants students excused absences from class or other organized activities or observance of religious holy days, unless the accommodation would create an undue hardship. Faculty are asked to be responsive to requests when students contact them in advance to request such an excused absence. Students are responsible for completing assignments given during their absence, but should be given an opportunity to make up work missed because of religious observance.

Once a student has registered for a class, the student is expected to examine the course syllabus for potential conflicts with holy days and to notify the instructor by the end of the first week of classes of any conflicts that may require an absence (including any required additional preparation/travel time). The student is also expected to remind the faculty member in advance of the missed class, and to make arrangements in advance (with the faculty member) to make up any missed work or in-class material within a reasonable amount of time.

The policy, in full, may be accessed through this link (http://www.du.edu/studentlife/religiouslife/about-us/policy).

Traditional Bachelor's Program Academic Calendar

**Autumn Quarter 2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 6-12</td>
<td>Sunday-Saturday</td>
<td>New student orientation and registration</td>
</tr>
<tr>
<td>September 14</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>November 19</td>
<td>Thursday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Nov 20 - 23</td>
<td>Friday - Monday</td>
<td>Final Exam Period</td>
</tr>
</tbody>
</table>

**Winter Interterm 2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 24</td>
<td>Tuesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>December 24</td>
<td>Thursday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

**Winter Quarter 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4</td>
<td>Monday</td>
<td>New student orientation and registration</td>
</tr>
<tr>
<td>January 4</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 18</td>
<td>Monday</td>
<td>Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>March 9</td>
<td>Wednesday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>March 10 - 13</td>
<td>Thursday – Sunday</td>
<td>Final examination period</td>
</tr>
</tbody>
</table>

**Spring Interterm (Break) 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 14</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>March 20</td>
<td>Sunday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>
### Spring Quarter 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 18</td>
<td>Friday</td>
<td>New student orientation and registration</td>
</tr>
<tr>
<td>March 21</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>May 27</td>
<td>Friday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>May 28 - June 2</td>
<td>Saturday - Thursday</td>
<td>Final Examination Period</td>
</tr>
<tr>
<td>May 30</td>
<td>Monday</td>
<td>Memorial Day</td>
</tr>
<tr>
<td>June 3</td>
<td>Friday</td>
<td>Graduate commencement</td>
</tr>
<tr>
<td>June 4</td>
<td>Saturday</td>
<td>Undergraduate commencement</td>
</tr>
</tbody>
</table>

### Summer Interterm 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 5</td>
<td>Sunday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June 12</td>
<td>Sunday</td>
<td>Classes begin</td>
</tr>
</tbody>
</table>

### Summer Quarter 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 13</td>
<td>Monday</td>
<td>Independence Day</td>
</tr>
<tr>
<td>July 4</td>
<td>Monday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>August 11</td>
<td>Thursday</td>
<td>Commencement</td>
</tr>
<tr>
<td>August 12</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

### Autumn Interterm 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 12</td>
<td>Friday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>August 27</td>
<td>Saturday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

### University Holidays

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 7, 2015</td>
<td>Monday</td>
<td>Labor Day</td>
</tr>
<tr>
<td>November 26 - 27, 2015</td>
<td>Thursday - Friday</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>December 25 - 31, 2014</td>
<td>Friday - Thursday</td>
<td>Winter Holiday</td>
</tr>
<tr>
<td>January 1, 2016</td>
<td>Friday</td>
<td>New Year's Day</td>
</tr>
<tr>
<td>January 18, 2016</td>
<td>Monday</td>
<td>Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>May 30, 2016</td>
<td>Monday</td>
<td>Memorial Day</td>
</tr>
<tr>
<td>July 4, 2016</td>
<td>Monday</td>
<td>Independence Day</td>
</tr>
</tbody>
</table>

### University College Bachelor of Arts Completion Program Academic Calendar

#### Autumn Quarter 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 9</td>
<td>Wednesday</td>
<td>Writing workshop on-campus</td>
</tr>
<tr>
<td>September 12</td>
<td>Saturday</td>
<td>New student orientation/tech workshop</td>
</tr>
<tr>
<td>September 14</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>November 20</td>
<td>Friday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

#### Winter Quarter 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 21</td>
<td>Monday</td>
<td>Writing workshop on-campus</td>
</tr>
<tr>
<td>January 2</td>
<td>Saturday</td>
<td>New student orientation/tech workshop</td>
</tr>
<tr>
<td>January 4</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 18</td>
<td>Monday</td>
<td>Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>March 11</td>
<td>Friday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

#### Spring Quarter 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 12</td>
<td>Saturday</td>
<td>New student orientation/tech workshop</td>
</tr>
<tr>
<td>March 16</td>
<td>Wednesday</td>
<td>Writing workshop on-campus</td>
</tr>
</tbody>
</table>
March 21 Monday Classes begin
May 27 Friday Last day of classes
May 30 Monday Memorial Day
June 3 Friday Graduate commencement
June 4 Saturday Undergraduate commencement

**Summer Quarter 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>New student orientation/tech workshop</td>
</tr>
<tr>
<td>May 25</td>
<td>Wednesday</td>
<td>Writing workshop on-campus</td>
</tr>
<tr>
<td>June 6</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 4</td>
<td>Monday</td>
<td>Independence Day</td>
</tr>
<tr>
<td>August 11</td>
<td>Thursday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>August 12</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

**University Holidays**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Holiday</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 7, 2015</td>
<td>Monday</td>
<td>Labor Day</td>
</tr>
<tr>
<td>November 26 - 27, 2015</td>
<td>Thursday - Friday</td>
<td></td>
</tr>
<tr>
<td>December 25 - 31, 2015</td>
<td>Friday - Thursday</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>January 1, 2016</td>
<td>Friday</td>
<td>Winter Holiday</td>
</tr>
<tr>
<td>January 18, 2016</td>
<td>Monday</td>
<td>New Year’s Day</td>
</tr>
<tr>
<td>May 30, 2016</td>
<td>Monday</td>
<td>Martin Luther King Jr. Day</td>
</tr>
<tr>
<td>July 4, 2016</td>
<td>Monday</td>
<td>Memorial Day</td>
</tr>
</tbody>
</table>

**Unit of Credit**

The University of Denver unit of credit is the quarter hour. In general, each quarter hour of credit requires one class period of 50 minutes each week. During summer session, class periods last at least 60 minutes, with some scheduled for longer blocks of time. Depending on the instruction method, the quarter-hour credit may not equal the hours spent in class.
Undergraduate Degree Programs and Requirements

The University of Denver offers bachelor's degrees through a traditional bachelor's program and a bachelor of arts completion program through University College. The programs have separate application and admission processes. Each of the programs has distinct overall curriculum requirements as well as requirements associated with individual degrees.

This section of the bulletin provides information on admission and degree requirements under each program. Requirements for specific majors and minors are outlined separately in the Major and Minor Requirements (p. 57) section of the bulletin. The chart on the Degrees and Programs of Study (p. 24) page provides information about applicable degree, major and minor combinations.

Requirements for Entrance to Special Programs and Courses

Admission to the University does not automatically admit a student to certain courses, degree programs or specialized programs. Consult the appropriate program and course descriptions in this bulletin for details concerning special admission requirements.

Degrees and Programs of Study

The chart below lists the majors, minors, concentrations and applicable degrees available. Many majors, and some minors, may only be pursued in conjunction with specific degree programs. If a major or minor may only be pursued with a specific degree program, this is indicated by the degree acronym in the chart below. Programs of study available as "secondary majors (p. 32)" in the traditional bachelor's program, which may be pursued regardless of the degree, are also indicated below.

<table>
<thead>
<tr>
<th>Program of Study</th>
<th>Major</th>
<th>Minor</th>
<th>Concentration</th>
<th>Certificate</th>
<th>Secondary Major</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional Bachelors Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Accountancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>BSAcc (p. 58)</td>
<td>Business Only (p. 58)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Anthropology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>BA (p. 70)</td>
<td>All Degrees (p. 70)</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>School of Art and Art History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>BA (p. 78)</td>
<td>All Degrees (p. 78)</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Art History</td>
<td>BA (p. 78)</td>
<td>All Degrees (p. 78)</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Pre-Art-Conservation</td>
<td>BFA (p. 78)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art</td>
<td>BFA (p. 78)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Studies Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Studies</td>
<td>BA (p. 90)</td>
<td>All Degrees (p. 90)</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Department of Biological Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>BA or BS (p. 93)</td>
<td>All Degrees (p. 93)</td>
<td></td>
<td>Cognitive Neuroscience (p. 93)</td>
<td></td>
</tr>
<tr>
<td>Ecology &amp; Biodiversity</td>
<td>BA or BS (p. 93)</td>
<td>All Degrees (p. 93)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Biology</td>
<td>BA or BS (p. 93)</td>
<td>All Degrees (p. 93)</td>
<td></td>
<td>Cognitive Neuroscience (p. 93)</td>
<td></td>
</tr>
<tr>
<td>Department of Business Information and Analytics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Analytics</td>
<td>BSBA (p. 112)</td>
<td>All Degrees (p. 112)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
<td></td>
<td></td>
<td>Business Only (p. 112)</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td></td>
<td></td>
<td>All Degrees (p. 112)</td>
<td></td>
</tr>
<tr>
<td>Business Administration Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department / Program</td>
<td>Degree Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Business Administration</strong></td>
<td>Non-Business Only (p. 111)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Chemistry and Biochemistry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>BA or BS (p. 116)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td>BSCh (p. 116)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Chemistry</td>
<td>BS (p. 116)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Communication Studies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Studies</td>
<td>BA (p. 128)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Computer Science</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>BS (p. 135)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Computing</td>
<td>BA (p. 135)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Game Development</td>
<td>BA or BS (p. 135)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Economics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>BA (p. 141)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emergent Digital Practices Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergent Digital Practices</td>
<td>BA or BFA (p. 145)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Electrical and Computer Engineering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>BScPE (p. )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>BSEE (p. 152)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of Mechanical and Materials Engineering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>BSME (p. )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department of English</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>BA (p. 179)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Science Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>BA or BS (p. 193)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiman School of Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>BSBA (p. 186)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender and Women’s Studies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender and Women’s Studies</td>
<td>BA (p. 189)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Science Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>BA or BS (p. 193)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiman School of Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>BSBA (p. 186)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender and Women’s Studies</td>
<td>BA (p. 189)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Yes indicates that the degree is offered.
| Department of Geography and the Environment | | |
| Geography | BA or BS (p. 193) | All Degrees (p. 193) |
| Geographic Information Science | | |
| Geology | | All Degrees (p. 193) |
| Department of History | | |
| History | BA (p. 206) | All Degrees (p. 206) | Yes |
| Fritz Knoebel School of Hospitality Management | | |
| Hospitality Management | | BSBA (p. 215) |
| Integrated Sciences | | |
| Integrated Sciences | | BA (p. 220) |
| Intercultural Global Studies Program | | |
| Intercultural Global Studies | | All Degrees (p. 220) |
| Josef Korbel School of International Studies | | |
| International Studies | BA (p. 222) | All Degrees (p. 222) |
| Judaic Studies Program | | |
| Judaic Studies | | All Degrees (p. 232) |
| Department of Languages and Literatures | | |
| Chinese | | All Degrees (p. 237) |
| French | BA (p. 237) | All Degrees (p. 237) | Yes |
| French Culture and Civilization | | All Degrees (p. 237) |
| German | BA (p. 237) | All Degrees (p. 237) | Yes |
| Hebrew | | All Degrees (p. 237) |
| Italian | BA (p. 237) | All Degrees (p. 237) | Yes |
| Japanese | | All Degrees (p. 237) |
| Latin | | All Degrees (p. 237) |
| Russian | BA (p. 237) | All Degrees (p. 237) | Yes |
| Spanish | BA (p. 237) | All Degrees (p. 237) | Yes |
| Pioneer Leadership Program | | |
| Leadership Studies | | All Degrees (p. 254) |
| Department of Business Ethics and Legal Studies | | |
| Legal Studies | | Business Only (p. 256) |
| Department of Management | | |
| General Business | BSBA (p. 111) | |
| International Business | BSBA (p. 111) | |
| Management | BSBA (p. 258) | Business Only (p. 258) |
| Department of Marketing | | |
| Marketing | BSBA (p. 261) | All Degrees (p. 261) |
### Department of Mathematics

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>BA or BS</td>
<td>(p. 266)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 266)</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td>(p. 266)</td>
</tr>
</tbody>
</table>

### Department of Media, Film and Journalism Studies

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film Studies and Production</td>
<td>BA</td>
<td>(p. 270)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 270)</td>
<td></td>
</tr>
<tr>
<td>Journalism Studies</td>
<td>BA</td>
<td>(p. 270)</td>
</tr>
<tr>
<td>Media Studies</td>
<td>BA</td>
<td>(p. 270)</td>
</tr>
<tr>
<td>Strategic Communications</td>
<td>BA</td>
<td>(p. 270)</td>
</tr>
</tbody>
</table>

### Lamont School of Music

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>BM</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Jazz Studies &amp; Commercial Music</td>
<td>BM</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Music</td>
<td>BA</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Performance</td>
<td>BM</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Bass, Bassoon, Cello, Clarinet, Euphonium, Flute, Guitar, Harp, Horn, Organ, Percussion, Piano, Piano Performance/ Pedagogy, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Voice</td>
<td>Artist Diploma</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Suzuki Pedagogy

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording and Audio Production</td>
<td>BM</td>
<td>(p. 280)</td>
</tr>
<tr>
<td>Suzuki Pedagogy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Department of Philosophy

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy</td>
<td>BA</td>
<td>(p. 310)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 310)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Department of Physics and Astronomy

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astrophysics</td>
<td>All Degrees</td>
<td>(p. 317)</td>
</tr>
<tr>
<td>Physics</td>
<td>BA or BS</td>
<td>(p. 317)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 317)</td>
<td></td>
</tr>
<tr>
<td>Biological Physics (BS only)</td>
<td>(p. 317)</td>
<td></td>
</tr>
<tr>
<td>Computational Physics (BS only)</td>
<td>(p. 317)</td>
<td></td>
</tr>
<tr>
<td>Nanophysics (BS only)</td>
<td>(p. 317)</td>
<td></td>
</tr>
</tbody>
</table>

### Medical Physics

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Degrees</td>
<td>(p. 317)</td>
<td></td>
</tr>
</tbody>
</table>

### Department of Political Science

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science</td>
<td>BA</td>
<td>(p. 326)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 326)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Department of Psychology

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>BA or BS</td>
<td>(p. 332)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 332)</td>
<td></td>
</tr>
<tr>
<td>Cognitive Neuroscience</td>
<td></td>
<td>(p. 332)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Public Policy Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Policy</td>
<td>BA</td>
<td>(p. 340)</td>
</tr>
<tr>
<td>All Degrees</td>
<td>(p. 340)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burns School of Real Estate and Construction Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate and the Built Environment BSBA (p. 343)</td>
<td>All Degrees (p. 343)</td>
<td>Real Estate (p. 343)</td>
</tr>
<tr>
<td></td>
<td>All Degrees (p. 343)</td>
<td>Property Development (p. 343)</td>
</tr>
<tr>
<td></td>
<td>All Degrees (p. 343)</td>
<td>Construction Project Management (p. 343)</td>
</tr>
<tr>
<td>Corporate Real Estate and Facilities Management (p. 343)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department of Religious Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Studies BA (p. 348)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sociological Studies Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociological Studies BA (p. 357)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department of Sociology and Criminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology BA (p. 358)</td>
</tr>
<tr>
<td>Criminology BA (p. 358)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability All Degrees (p. 365)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department of Theatre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre BA (p. 367)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Urban Studies Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Studies All Degrees (p. 371)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wellness Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellness All Degrees (p. 372)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Writing Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Practices All Degrees (p. 374)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University College Bachelor of Arts Completion Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Arts Communication Arts BA (p. 380)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Studies Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Studies BA (p. 382)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Commerce and Transportation Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Commerce and Transportation BA (p. 383)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Studies Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Studies BA (p. 384)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Technology Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology BA (p. 386)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership and Organization Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>


Traditional Bachelor's Program

Build the Foundation for Your Future

Open the door to a world of possibilities. As an undergraduate student at DU, you'll get a multidisciplinary education that's rooted in a clear commitment to taking on the great issues of our time.

Enriched by distinctive learning experiences that extend from the classroom to the field, laboratory, community and professional world, your time here will be informed by diverse perspectives that deepen your understanding of the global culture. In the end, you'll be uniquely prepared to confront the challenges and opportunities ahead.

Innovative Degree Programs

Select from more than 60 undergraduate majors, including both traditional and progressive offerings. We also offer compelling dual degree programs that span a variety of disciplines, including business, education, social work, art history, geographic information science, international studies, public policy, engineering and law.

Admission

The University of Denver seeks students who have challenged themselves academically and who have demonstrated success in English, math, social studies, science and foreign language. In selecting the incoming class, Undergraduate Admission considers all available information including evidence of academic achievement, contributions to school and community, extracurricular activities and leadership.

The University of Denver uses both the Common Application and the DU Pioneer Application. We encourage you to apply online at www.du.edu/admission.

Undergraduate Admission invites students to learn more about the DU experience through our many visit programs. During a campus visit, you will learn about our admission process, tour our facilities, speak with current students and investigate the different programs of study, extracurricular activities and social offerings available to students.

To register for a campus visit program, go to www.du.edu/visit or call Undergraduate Admission at 303-871-7711.

Admission Standards

When reviewing an application, our admission committee considers the following:

- academic achievement
- grade point average
- standardized test scores
- DU's whole-person assessment, essay and letters of recommendation

Academic Achievement

The typical accepted high school student has taken a strong, competitive class schedule, which may include college preparatory, Advanced Placement and International Baccalaureate courses.

Grade Point Average (GPA)

The average high school GPA of students accepted for fall 2014 was 3.69. The middle 50 percent ranged from 3.48–4.0.

Standardized Tests

Although previous academic performance is the most important factor in our admission process, we also consider scores earned on the SAT or ACT exams. Applicants are required to submit the official results of their SAT or ACT. If you choose to submit test scores from more than one testing date, we will mix and match your results to create a superscore. The writing components for both the SAT and ACT will be accepted for review but will not be used for admission decisions.

The middle 50 percent test scores of students accepted for fall 2014 were the following:

<table>
<thead>
<tr>
<th>Test</th>
<th>Scores</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>1140-1310</td>
<td>1232</td>
</tr>
<tr>
<td>ACT</td>
<td>26-31</td>
<td>28</td>
</tr>
</tbody>
</table>
Whole-Person Assessment
DU students assume responsibilities outside the classroom; they are leaders, volunteers, artists, musicians, athletes, actors and people who contribute to their community as a whole. Our admission committee seeks well-rounded students who have contributed to their high school and local communities and who will contribute to the DU community.

Programs with Additional Admission Requirements
Daniels College of Business degree programs, Lamont School of Music degree programs and the bachelor of fine arts in the School of Art and Art History have requirements for admission beyond the criteria listed above.

Daniels College of Business
The Daniels College of Business requires a secondary admission process for students interested in pursuing a business major. For most students, the application process and admission decision will occur early in the fall quarter of the sophomore year. A small number of high-achieving students may be granted direct admission to Daniels when accepted to the University of Denver, and transfer students will apply both to the University and to Daniels concurrently.

The selection process is competitive, and admission is not guaranteed. Daniels looks for well-rounded students and embraces diversity and inclusive excellence to create a rich and engaged learning community. A holistic set of criteria will be used to evaluate each applicant in the categories of academic performance, University engagement, personal character and future potential. Specifically, we seek energized, highly motivated and committed scholars interested in adding to the Daniels community in ways that will leave it a better place for those who follow.

Please refer to the Daniels website (http://daniels.du.edu) for specific information related to the admission process and requirements. Students needing special accommodations should contact University Disability Services at dsp@du.edu, 303-871-3939 or www.du.edu/studentlife/disability.

Lamont School of Music
In addition to being accepted for study by the University, students desiring admission to the Lamont School of Music must audition with the appropriate music faculty and complete a Lamont application. Audition requirements differ by area. Requirements can be reviewed on the Lamont School of Music website. An in-person audition is preferable; however, students may submit a high quality video recording for review.

School of Art and Art History
Admission to the BFA program is by portfolio review. Contact the School of Art and Art History (p. 78) for details.

Early Experience Applicants
After completing their sophomore or junior year in high school, students may enroll for limited study at the University, provided they meet admission requirements and are recommended by a high school counselor. Courses completed can be applied toward a University of Denver degree if the student is admitted as a degree candidate.

First-Year Domestic Student Application Options
Application and Decision Dates
For first-year domestic students, DU offers two application programs for the fall quarter: Early Action and Regular Decision.

Early Action
Early Action is a nonbinding program through which students obtain an early admission decision.

- Apply by November 1
- Decision letter: late December
- Deposit by May 1

Regular Decision
Regular Decision is the final admission deadline for consideration for the fall quarter.

- Apply by January 15
- Decision letter: mid-March
- Deposit by May 1

Late Action Applications
First-year applications postmarked after January 15 will be considered on a case-by-case, space-available basis.
International Students

The University of Denver currently enrolls nearly 1500 international students from 89 countries. Non-U.S. citizens applying for undergraduate admission may complete the Common Application online at https://www.commonapp.org. U.S. permanent residents and those with refugee or asylum status applying for undergraduate admission should do so directly through the Office of Undergraduate Admission.

Deadlines for International Students

International first-year applicants will be considered for fall (September) admission only. Applications must be postmarked by January 15 for the following fall quarter. First-year applications postmarked after January 15 will be considered on a space-available basis.

The recommended application deadlines for transfer students are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Day of the Week</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall quarter</td>
<td>(September)</td>
<td>July 1</td>
</tr>
<tr>
<td>Winter quarter</td>
<td>(January)</td>
<td>October 15</td>
</tr>
<tr>
<td>Spring quarter</td>
<td>(March)</td>
<td>December 15 (limited space)</td>
</tr>
<tr>
<td>Summer quarter</td>
<td>(June)</td>
<td>March 15 (limited space)</td>
</tr>
</tbody>
</table>

All undergraduate international applicants will be automatically considered for merit-based scholarships. Applicants will be notified of their scholarship award in their admission letter.

Admission Standards for International Students

In addition to meeting all University of Denver admission requirements, non-native speakers of English must present proof of English proficiency. The University requires a minimum score of 80 iBT (Internet-based) on the Test of English as a Foreign Language (TOEFL) or a score of 6.5 with no band scores below 6.0 on the International English Language Testing System (IELTS) and with at least 20 on all subscores. No institutional TOEFL scores will be accepted.

Students who are non-native speakers of English and have not yet completed 30 transferrable academic semester/university credits at an institution where English is the language of instruction and examination will be required to take the English Language Proficiency Assessment (ELPA) during international student orientation. For traditional undergraduate students, the results of the assessment will determine placement into one of the required First-Year Seminars and, if necessary, placement into additional bridge courses for which students will receive elective credit toward their degree. ELPA results may also require students to enroll in the full-time intensive English program at DU’s English Language Center (ELC), regardless of TOEFL or IELTS scores. In this case, the student will remain enrolled in the ELC program until he or she has successfully completed the program, after which the student may enroll in his or her degree program.

Exemptions: Students are generally exempt from the English proficiency test requirement if they have any of the following:

- secondary/high school diploma from a school where the language of instruction is English
- 30 semester credits of coursework from a university or college where English is the sole language of instruction and examination
- IGCSE/GCSE grade of A or B on the English examination
- HKCEE grade of A or B on the English examination syllabus B
- HKDSE level of 5 on the English Language Core Subject examination

English Conditional Admission (ECA): Students who are academically admissible to the University of Denver, but lack the English proficiency necessary to begin academic classes, may be ECA admitted. These conditionally admitted students must either submit a TOEFL/IELTS score that meets the minimum requirements or pass, with satisfactory results, the college-preparation level of English at the University of Denver’s English Language Center.

Contact the English Language Center by mail: 1958 S. Josephine St., Denver, CO 80208-9300; telephone: 303-871-3075; fax: 303-871-6622; or email: elc@du.edu. Completion of an intensive English program other than that offered by the University of Denver’s English Language Center does not satisfy this requirement. Note that admission to the English Language Center does not automatically grant admission to University of Denver degree programs.

For more information regarding admission for international students, contact the University of Denver Office of International Admission by mail: 114 University Hall, 2197 S. University Blvd., Denver, CO 80208-9401; telephone: 303-871-2790; fax: 303-871-3522; email: INTLADM@du.edu; or web: http://www.du.edu/apply/admission/apply/international/.

Transfer Students

Each year, the University of Denver welcomes more than 200 transfer students to our community. Qualified applicants are admitted on a rolling basis, provided space is available. An application is not considered complete until official transcripts have been received.

Deadlines for Transfer Applicants

Application and all supporting materials should be completed and received no later than the following dates:
Admission Standards for Transfer Students

To be considered for admission, students transferring to DU from another regionally accredited institution must have a competitive grade point average in all college coursework. The admission committee looks for

- grades that reflect solid work at the college level—generally “B” grades or better, and
- course work that demonstrates serious intentions.

In addition, we consider any special situations or circumstances that may have influenced your academic performance in college. You must submit official transcripts from each college or university you have attended. If you have not successfully completed 30 semester hours (45 quarter hours), you must also submit your high school transcript and test scores. If you are unsure about your candidacy to the University of Denver, please call Undergraduate Admission at 303-871-2036.

Readmitted Students

A student in academic good standing who withdraws from the University for one or more quarters (except summer session) but less than five calendar years must submit an Application for Re-Entry (http://www.du.edu/studentlife/advising/policies-forms/re-entry-form.html) with Academic Advising and official transcripts of any college study completed during the time of absence.

Students who have not been enrolled at the University for more than five calendar years from their last term of enrollment must reapply for admission to the University through Undergraduate Admission. Students who are accepted for readmission may choose to complete their degree under the requirements of their original University bulletin or the current bulletin.

Second Baccalaureate Degrees

A student with a bachelor’s degree from an accredited college or university who wants to earn a second bachelor’s degree from the University of Denver must meet normal admission requirements for transfer students. Please note that students pursuing a second baccalaureate degree will not be eligible for most forms of aid and will need to complete the following:

- residence requirement of at least 45 credits (one year of full-time study)
- major and minor requirements as defined by the appropriate departments and schools
- common curriculum requirements
- academic good standing (GPA of 2.0 or higher) at the time of graduation

Consult Concurrent and Second Baccalaureate Degrees (p. 49) for specific requirements.

Special Status

Visiting students from another college or university who wish to pursue one to three quarters of study at DU and wish to transfer the credit to their home institution may apply as special-status students. This also applies to students seeking coursework for personal interest or personal growth. A student seeking a DU degree should not use a special-status application. Students who have previously earned a bachelor’s degree and wish to take classes should contact the Graduate Studies office to complete a Graduate Special-Status Application. A special-status student must submit an official statement of good standing or an official transcript sent directly from the last institution attended. Coursework completed as a special-status student may be limited and is not automatically accepted for a degree at the University of Denver.

Visiting Summer Students

Domestic students visiting for summer quarter register directly through the Office of the Registrar; they do not apply, nor do they submit transcripts.

Additional information about the summer quarter is available in the academic calendar (p. 19) section of this Bulletin and at the summer session (http://www.du.edu/summer) website.

Degrees and Degree Requirements

The University of Denver awards eleven distinct baccalaureate degrees. The curriculum for each program varies based on the major discipline and ancillary courses taken.
BA and BS Degrees

The BA (Bachelor of Arts (p. 38)) degree is the principal undergraduate degree in the arts, humanities and social sciences and is awarded in most natural sciences as well. The BS (Bachelor of Science) degree is awarded in most natural science disciplines and Psychology.

The BA degree assures students of a breadth of study in the liberal arts and offers greater flexibility in study. For example no more than sixty credit hours may be taken from any one department and students may declare majors in numerous disciplines. The BA degree requires 183 credits, a major (40-60 quarter hours), a minor (20-28 quarter hours) or second major as well as completion of the Common Curriculum.

The BS (Bachelor of Science (p. 40)) degree provides greater focus on the major field of study and related (cognate) subjects. The BS degree requires 183 credits. The major requires at least 45 credits, at least 25 or which must be 2000- and 3000-level courses. The BS degree requires two minors, or two majors and a minor, as well as completion of the Common Curriculum. One minor or the second major must be in the natural sciences. (Interdisciplinary area majors are exempt from the last requirement.)

Academically, a Bachelor of Arts degree and a Bachelor of Science degree are equally valued. Both the BA and the BS degrees prepare students for graduate study.

Specialized Degrees

Specialized undergraduate degrees are offered in specific disciplines, most often in fields with distinct accreditation. Specialized undergraduate degrees at the University of Denver are:

- BFA Bachelor of Fine Arts (p. 38)
- BM Bachelor of Music (p. 39)
- BSAcc Bachelor of Science in Accounting (p. 41)
- BSBA Bachelor of Science in Business Administration (p. 43)
- BSCh Bachelor of Science in Chemistry (p. 46)
- BSCpE Bachelor of Science in Computer Engineering (p. 47)
- BSEE Bachelor of Science in Electrical Engineering (p. 47)
- BSME Bachelor of Science in Mechanical Engineering (p. 48)

Major and Minor Requirements

The departmental major or minor is a program of courses taken in one department or, in the case of an interdisciplinary major or minor, a program of related courses taken in more than one department. The University offers a number of different degree options. Please review specific degree information for major and minor requirements. Students usually declare a major (or majors) by the end of their sophomore year.

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of "C-" or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Double Majors

In certain degree programs (BA, BS and BSBA), students may complete a second major. A second major will substitute for a minor, if required. The second major must be offered in that particular degree program. E.g., business majors are only available in the BSBA program.

Secondary Majors

Secondary majors offer the opportunity to earn one baccalaureate degree in one program supplemented by a rich intellectual experience in a second field of specialization outside that primary program. The “secondary major” offers the option of studying two subjects from two different degree programs while earning a baccalaureate degree in the first major without the requirement of earning a second baccalaureate degree in the secondary major.

Specifically, this option allows a student from one degree program to earn a secondary major from a participating department within a different program by fulfilling the requirements (normally 40–45 quarter hours) set forth by that participating department but without requiring students to complete additional courses that comprise that other program’s core curriculum. Through the secondary major option, upon graduation, a student earns one baccalaureate degree from DU (through the fulfillment of all requirements from the student’s primary degree program). Although that student will not be awarded a second degree, the student’s transcript will reflect that he or she earned a secondary major in that second area of study.
As an illustration, if a B.S. in computer science student wishes to earn a secondary major in philosophy, he or she will need to satisfy all of the requirements of both the B.S. degree in computer science and the secondary major in philosophy. The student will graduate with a “B.S. in Computer Science.” The transcript will note that the student earned a B.S. degree in Computer Science with a Secondary Major in Philosophy.

A current list of secondary majors may be found under the Degrees and Programs of Study (p. 24) section.

**Upper Division Requirement**

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

**Common Curriculum**

The University of Denver’s Common Curriculum provides students with a well-rounded education, creates context for major or minor course of study and introduces students to new areas of interest. The Common Curriculum is grounded in a breadth of experiences and ways of inquiry congruent with DU’s goal of providing an outstanding educational experience that empowers students to integrate and apply knowledge from across the disciplines and imagine new possibilities for themselves, their communities and the world. Consistent with DU’s mission, the Common Curriculum promotes learning by engaging with students in advancing scholarly inquiry, cultivating critical and creative thought, and generating knowledge.

Common Curriculum courses contribute to an intellectually vibrant campus community and create, in turn, a challenging, inclusive, ethical and liberating learning environment. From students’ initial First-Year Seminar to the Common Curriculum’s culminating Advanced Seminar, the curriculum encourages connections across modes of learning. By engaging in course work across diverse experiences and areas of knowledge, DU students cultivate critical and creative thought, preparing them for leadership and citizenship in our global society.

**Common Curriculum Requirements**

The Common Curriculum at the University of Denver plays a central role in every undergraduate student’s education. Please review the Common Curriculum requirements matrix below, which provides a summary of DU’s Common Curriculum requirements, along with short statements that explain why the courses in the various parts of the curriculum are important in today’s world. These descriptions are summaries of what students should be able to achieve through the successful completion of these classes. The matrix is followed by descriptive paragraphs that explain why each class a student takes is important and where it fits in the educational plan of the University.

An undergraduate at the University typically takes 52 to 60 credits in the Common Curriculum:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Language</td>
<td>4-12</td>
</tr>
<tr>
<td>Ways of Knowing</td>
<td>32</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>52-60</strong></td>
</tr>
</tbody>
</table>

Because certain programs have slightly different requirements in the Common Curriculum and because AP and IB courses or transfer courses from other universities and colleges may change the distribution of the requirements for individual students, always consult an advisor regarding Common Curriculum planning for courses at the University and abroad.

**First-Year Seminar**

1 course (4 credits)

First-Year Seminars (p. 188) are designed to provide students with an in-depth academic experience that will be rigorous and engaging. Students develop the kinds of academic skills that prepare them for successful college work, which might include one or more of the following:

- critical reading and thinking
- writing and discussion
- quantitative reasoning
- argument and debate

Faculty members teach their passions in which they have particular expertise and enthusiasm, and each First-Year Seminar has a unique topic, with 80–85 different First-Year Seminars offered each fall quarter. For students to be able to engage with faculty in the exploration of these topics is an extraordinary opportunity for academic and personal growth. Instructors of the First-Year Seminars also serve as students’ academic advisors and faculty mentors for the entire first year. Students meet individually with their mentors during winter and spring quarters for advising and registration help. This course must be taken at the University of Denver. Any student who either withdraws from or fails the First-Year Seminar must meet with the Associate Provost for Undergraduate Programs to request a new academic advisor and to determine the means by which this degree requirement may be fulfilled. Students transferring to DU are exempt from this requirement if they are classified as a transfer student.
Writing and Rhetoric

2 courses (8 credits)
Being able to convey written information and ideas in ways that are compelling to specific audiences is essential both in college and beyond. Beginning in the winter quarter of their first year, students take two sequenced writing courses, usually WRIT 1122 and WRIT 1133. Together, these courses teach strategies for writing to well-educated readers in diverse academic and nonacademic situations. Students learn rhetorical principles, the analysis and use of readings and source materials, and techniques for generating, revising and editing texts for specific situations. They also learn to present and justify positions and to produce researched writing in various scholarly traditions, including:

- textual/interpretive (the analysis of texts or artifacts such as images or events);
- qualitative (analyses based on observations or interviews); or
- quantitative (information gained through measurement).

In each course, students complete several writing exercises and, through sustained practice and systematic instructor guidance, they complete at least four polished papers, totaling some 20–25 pages. By the end of the two-course sequence, students have completed at least 40–50 pages of polished writing. These courses lay the foundation for writing in further Common Curriculum courses (including the Advanced Seminar), writing in students’ majors and writing in professional and civic life after graduation.

Language

1–3 courses (4–12 credits)
The faculty of the University of Denver believe that studying culture through language at the university level is crucial in our globalized world, and courses in this area reflect that belief. Students who have completed academic secondary education in a language other than English are exempt from the language requirement. The registrar determines if a student’s transcripts qualify him or her for an exemption. All other incoming students who know or have studied one of the languages offered at DU are required to take our language placement test prior to class registration to place them properly in that language’s curriculum. Placement exams are administered through the Center for World Languages and Cultures. Students must complete the elementary sequence of a language or take one four-credit course at their level if they place beyond the elementary sequence. Alternatively, students may choose to start a new language and complete the first-year sequence in that language. In these courses, students will learn linguistic skills in a language other than English in the setting of an internationalizing university that encourages multi-skill language learning. Students taking such courses also will be studying a different expression of culture through language, thereby learning both about a new culture and about themselves and their personal, social and cultural backgrounds. Students will learn to appreciate human diversity as it is expressed linguistically and transculturally in modern society. Students are exempt from the language requirement in the following degree programs: BFA, BSEE, BSME and BScE. Students in the bachelor of music degree program may choose between eight credits in one foreign language or eight credits in Scientific Inquiry: The Natural and Physical World.

Analytical Inquiry: The Natural and Physical World

1 course (4 credits)
Mathematics, formal reasoning and, more recently, computational sciences are crucial foundations for many disciplines as they enable and support formal modes of inquiry, particularly for disciplines related to the natural and physical world. For example, today’s physics and engineering knowledge would be impossible without accompanying advances in mathematics. Similarly, advances in the life sciences, like genomics, rely heavily on computational sciences. Students must take one course in this area, which is designed to provide all students, regardless of the student’s major area of study, the basic knowledge of how to understand and use principles of mathematics and computational sciences as a formal means of inquiry in the natural and physical world.

Analytical Inquiry: Society and Culture

2 course minimum (8 credits)
Through these courses, students gain knowledge essential for today’s global society, recognizing that human cultures are specific to time and place and that the practices and values of different societies vary widely. By gaining greater understanding of diverse cultural products, students will be better able to understand the world today and their own place in it. Students take two courses in different subjects studied from the perspectives of the arts and humanities, exploring culture and society from different perspectives. In these courses, students learn how to analyze the products of human cultures, including works of art, music, literature, philosophy and history. Students engage critically with such works through exposure to the vocabulary, concepts and methods used to analyze those works. Students explore how ideas and creative expressions both shape and are shaped by human experiences. Students who are AHSS majors/minors may apply one Analytical Inquiry: Society and Culture course (four credits) per major/minor program to partially satisfy both major/minor and Common Curriculum requirements if that course is listed as meeting the outcomes of a section of the Common Curriculum requirements. Non-music majors may take up to four one-credit ensembles towards this requirement.

Scientific Inquiry: The Natural and Physical World

3 sequential courses (12 credits)
Science and technology play increasing roles in the most profound challenges and the greatest opportunities that we face as global societies. Gaining knowledge of the practice and promise of science is an essential responsibility of each educated citizen. While science provides the most thoroughly
Degrees and Degree Requirements

tested tools for developing accurate knowledge of nature, developing technologies shape our daily living and provide opportunities to ask questions that were not imaginable by previous generations. Courses provide students with a three-quarter experience that builds knowledge and application of scientific approaches in one core area. The three-quarter format with accompanying laboratories allows in-depth explorations that have significant social implications and that encourage development of reasoning skills and reflective judgment. By working between classroom and laboratory to understand the nature of science in the natural and physical world, students will apply scientific methods, analyze and interpret data, and justify conclusions where evidence is conflicting. Students will also explore the strengths and weaknesses of scientific knowledge and reflect on the connections between the natural sciences, developing technologies and other ways of knowing and constructing human experiences. Students in the BM degree program may choose between eight credits in the Language requirement or eight credits in the Scientific Inquiry: The Natural and Physical World requirement. Students in the BFA meet this requirement through eight credits taken in two sequential courses.

**Scientific Inquiry: Society and Culture**

2 course minimum (8 credits)

Knowledge of principles of human functioning and conduct in social and cultural contexts is essential for living in a culturally diverse and interdependent society. Understanding scientific approaches to discovering these principles enhances informed decisions for the public good and provides a way of thinking about problems and issues that complements other areas of inquiry and experiences. Through taking courses in this area, students learn about principles of human functioning and conduct in social and cultural contexts and come to understand how these are studied using scientific methods. Students take two courses in different subjects studied from the perspectives of the social sciences; they are thus exposed to varying approaches and levels of analysis (e.g., physiological, evolutionary, mental, social and cultural processes). Students who are AHSS majors/minors may apply one Scientific Inquiry: Society and Culture course (4 credits) per major/minor program to partially satisfy both major/minor and Common Curriculum requirements.

**Advanced Seminar**

1 course (4 credits)

While knowledge and professional skills found in a student’s major and minor are important foundations for accomplishment, successful individuals also must be able to navigate a complex political, social, cultural and economic environment that challenges more traditionally limited concepts of higher education and competencies. To help students better understand the demands of contemporary life, instructors teach an Advanced Seminar (ASEM) based in their area of expertise and passion. The topic will be approached from multiple perspectives in a course designed for non-majors. Studying in this setting, students demonstrate their ability to integrate different perspectives and synthesize diverse ideas through intensive writing on that topic. This course must be taken at the University of Denver. Students must complete all other Common Curriculum requirements before taking the Advanced Seminar.
**AREAS OF INQUIRY**

<table>
<thead>
<tr>
<th>The Natural &amp; Physical World</th>
<th>Society &amp; Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-Year Seminar</strong></td>
<td></td>
</tr>
<tr>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• demonstrate what it means to be an active member of an intellectual community by meeting rigorous academic expectations through critical reading, discussion, research and/or writing;</td>
<td></td>
</tr>
<tr>
<td>• practice newly acquired skills in an active learning environment where writing, performing, laboratory experiments, quantitative analyses or other forms of experiential and/or creative activities will shape the goals and activities of the seminar.</td>
<td></td>
</tr>
<tr>
<td><strong>Writing &amp; Rhetoric</strong></td>
<td></td>
</tr>
<tr>
<td>8 credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• analyze strategies used in a variety of rhetorical situations and employ those principles in their own writings and communications;</td>
<td></td>
</tr>
<tr>
<td>• analyze research and writing strategies used in a range of academic traditions and use those strategies in their own writings;</td>
<td></td>
</tr>
<tr>
<td>• adapt, to specific situations, a strong repertory of writing processes, including generating, shaping, revising, editing, proofreading and working with other writers.</td>
<td></td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td></td>
</tr>
<tr>
<td>4-12 sequential credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• based on writing samples at the start and end of the first year of language, students will demonstrate increased proficiency in a language of choice in a specific skill (e.g., writing, speaking, listening or reading);</td>
<td></td>
</tr>
<tr>
<td>• demonstrate proficiency in learning about a culture as embodied in a skill (e.g., writing, speaking, listening or reading) in a language of choice.</td>
<td></td>
</tr>
<tr>
<td><strong>Ways of Knowing: Analytical Query</strong></td>
<td>8 credits</td>
</tr>
<tr>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• apply formal reasoning, mathematics or computational science approaches to problem solving within mathematics or computational science, and other disciplines;</td>
<td></td>
</tr>
<tr>
<td>• understand and communicate connections between different areas of logic, mathematics or computational science, or their relevance to other disciplines;</td>
<td></td>
</tr>
<tr>
<td>• communicate formalisms in logic, mathematics or computing sciences.</td>
<td></td>
</tr>
<tr>
<td><strong>Ways of Knowing: Scientific Inquiry</strong></td>
<td>8 credits</td>
</tr>
<tr>
<td>12 sequential credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• articulate concepts and principles specific to a field of study in natural science or technology, and effectively apply scientific methods to ask questions, design and perform experiments, or judge arguments;</td>
<td></td>
</tr>
<tr>
<td>• recognize science as a process that considers uncertainty when drawing conclusions from scientific evidence and making predictions from existing data;</td>
<td></td>
</tr>
<tr>
<td>• apply and distinguish between qualitative and quantitative forms of analysis and evidence, and demonstrate skills for using and interpreting quantitative information in various formats based on validation and replication of results.</td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Seminar</strong></td>
<td></td>
</tr>
<tr>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>In these courses, students will</td>
<td></td>
</tr>
<tr>
<td>• integrate and apply knowledge and skills gained from Common Curriculum courses to new settings and complex problems;</td>
<td></td>
</tr>
<tr>
<td>• write effectively, providing appropriate evidence and reasoning for assertions.</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts

Total Credits Required for the BA: 183

Common Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Languages</td>
<td>4-12</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: The Natural and Physical World</td>
<td>12</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned program of courses</td>
<td>40-60</td>
</tr>
</tbody>
</table>

Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second area of concentration</td>
<td>20-28</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining hours of student's choice</td>
<td>51-71</td>
</tr>
</tbody>
</table>

Total Credits

183

Major and Minor Requirements

The major (40–60 credits) is a planned program of courses taken in one department or, in the case of an interdisciplinary major, a program of related courses taken in more than one department. For the bachelor of arts, at least 40 credits are required in the major. Individual departments may establish a greater number of required hours. (See departmental listing for details.) Of these, at least 25 credits must be in 2000- or 3000-level (upper-division) courses.

The minor (20–28 credits) is a program of courses in a second area of concentration. Individual departments may establish a greater number of required hours. (See departmental listing for details.) Of these, at least 5 credits must be in 2000- or 3000-level (upper-division) courses.

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of “C–” or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Double Major

For the bachelor of arts, students may choose majors in two departments and eliminate the minor.

Upper Division Requirement

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA Requirement

- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

Residence Requirement

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

Additional Policies

- A total of 60 credits earned in any one department is the maximum accepted toward meeting the minimum 183 credits for the degree. (Exception: BA with a major in music.)

BFA Degree Requirements

Total Credits Required for the BFA: 189-192

Common Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
</tbody>
</table>
Analytical Inquiry: Society and Culture 8
Scientific Inquiry: The Natural and Physical World 8
Scientific Inquiry: Society and Culture 8
Advanced Seminar 4

**Major Requirements**

See department listing for specific courses. 110-135

**Minor**

A minor is not required for the degree but may be completed if desired.

**Electives**

Remaining hours of student’s choice 13-35

**Total Credits** 192

**Major and Minor Requirements**

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of “C–” or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

**Upper Division Requirement**

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

**Degree GPA Requirement**

- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

**Residence Requirement**

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

**Bachelor of Music**

**Total Credits Required for the BM: 194**

**Common Curriculum**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Language (or option of Scientific Inquiry: Natural and Physical World)</td>
<td>8</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: The Natural and Physical World (or option of Language)</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

**Major Requirements**

See department for specific courses. 128-132

**Minor**

A minor is not required for the degree but may be completed if desired.

**Electives**

Electives may be music or non-music courses. 18-22

**Total Credits** 194

Specific status sheets for the various BM programs may be obtained from the Lamont School of Music.

**Music Performance Requirements**

**Ensemble Participation**

All full-time bachelor of music students must participate in a minimum of two major ensembles each quarter as assigned. Student teachers may be exempt when conflicts arise in schedules. All part-time music students must participate in one major ensemble each quarter, as assigned.
Convocation Attendance
All music students must attend three convocations.

Sophomore Proficiency
All BM students must pass a sophomore proficiency exam to continue the BM degree in the junior year.

Recitals
All bachelor of music (applied emphasis) students must present recitals for the completion of the degree. The specific requirements are as follows:

- bachelor of music, concentration in piano—half recital in sophomore year, full recital in junior year, full recital in senior year
- bachelor of music, all other emphases—half recital in junior year, full recital in senior year

Piano Proficiency Examination
All bachelor of music students must pass all piano proficiency requirements as designated for their degree no later than one quarter before graduation. This is not required for piano concentration students.

Major and Minor Requirements
- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of "C-" or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Upper Division Requirement
- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA Requirement
- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

Residence Requirement
- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

Bachelor of Science

Total Credits Required for the BS: 183

<table>
<thead>
<tr>
<th>Common Curriculum</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Languages</td>
<td>4-12</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: The Natural and Physical World</td>
<td>12</td>
</tr>
<tr>
<td>Scientific Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Major</td>
<td>45</td>
</tr>
<tr>
<td>At least 25 credits must be 2000- and 3000-level courses</td>
<td>45</td>
</tr>
<tr>
<td>Minor 1</td>
<td>15-28</td>
</tr>
<tr>
<td>Minor 2</td>
<td>15-28</td>
</tr>
<tr>
<td>Electives</td>
<td>42-56</td>
</tr>
<tr>
<td>Remaining hours of student’s choice</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>183</td>
</tr>
</tbody>
</table>

Major and Minor Requirements
In the bachelor of science curriculum, at least 45 credits are required for the major. Of these, at least 25 must be in 2000- and 3000-level courses. Minors approved for the BS degree range from 15–28 credits each. Students pursuing a BS degree must complete a major and two minors or two
majors and one minor. One minor must be in one of the natural sciences or psychology. A secondary major (p. 32) may be used to fulfill the requirement for a minor or additional major. Students completing an area major are not required to complete any minors.

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of “C–” or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Area Major

The area major meets the needs of students whose interests require a broad program of related interdepartmental study. At this time, the only area major available for bachelor of science students is environmental science. Please review the environmental science section for specific major requirements.

Upper Division Requirement

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA Requirement

- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

Residence Requirement

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

BSAcc Degree Requirements

Total Credits Required for the BSAcc: 186

<table>
<thead>
<tr>
<th>Common Curriculum</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Language</td>
<td>4-12</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: The Natural and Physical World</td>
<td>12</td>
</tr>
<tr>
<td>Scientific Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Non-Business Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1020 Introduction to Micro- and Macroeconomics I: History and Theories</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1200 Calculus for Business and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1951 Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

International Component approved by the student's major advisor

<table>
<thead>
<tr>
<th>Business Core Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1000 Gateway to Business</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1010 Analytics I: Data Management and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1020 Analytics II: Business Statistics and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1030 Introduction to Micro- and Macroeconomics II: Theories and Policies</td>
<td>4</td>
</tr>
<tr>
<td>LGST 2000 Foundations of Business Law</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 2200 Introduction to Financial Reporting</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2100 Management and Organizational Behavior</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 2800 Introduction to Marketing</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 2300 Accounting for Decision Making</td>
<td>4</td>
</tr>
<tr>
<td>FIN 2800 Financial Decision Making</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2020 Analytics III: Business Modeling and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>BUS 1999 Daniels College of Business Checkpoint 1 Assessment</td>
<td>0</td>
</tr>
<tr>
<td>BUS 2999 Daniels College of Business Checkpoint 2 Assessment</td>
<td>0</td>
</tr>
<tr>
<td>MGMT 2850 Business and Society</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 3800 Business Policy and Strategy</td>
<td>4</td>
</tr>
</tbody>
</table>
BSAcc Degree Requirements

Additional Degree Requirements
- ITEC 3155 Introduction to Database Applications in Accounting 4
- BUS 3500 Business Communications I 1

Major Requirements
- See department page for major requirements. 43

Minor
- A minor is not required for the degree but may be completed if desired.

Electives
- Remaining credits of student's choice. 26-36

Total Credits 186

1 this course may be used to fulfill a portion of the Scientific Inquiry: Society and Culture requirement
2 either of these courses may be used to complete the Analytical Inquiry: The Natural and Physical World requirement
3 completed after BUS 1000, INFO 1020, and LGST 2000; students must pass the assessment before registering for MGMT 2850.
4 completed after Checkpoint 2 courses; students must pass the assessment before registering for MGMT 3800.

Upper Division Requirement
- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

General Policies
- At least 50 percent of required business courses for the degree must be completed at the University of Denver.
- Students must earn a minimum GPA of 2.5 overall, in all business courses and in the major.
- Students must earn a minimum grade of "C-" in their additional non-business and business core requirements.

Residence Requirement
- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

Student International Experience Requirement
Business students must be prepared to interact with persons from other cultures and to manage in circumstances where business practices and social conventions are different from the student's native country. To meet this requirement, all students entering DU fall 2006 or thereafter must fulfill an international experience before they can graduate as a business major.

The preference is for a student to study abroad through the Cherrington Global Scholars program, but students may meet this requirement by completing any DU-approved study abroad program (HPM majors must study abroad). If travel is not possible, a student can satisfy this requirement by taking one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 3284</td>
<td>Consolidated Financial Statement</td>
<td>2</td>
</tr>
<tr>
<td>ACTG 3285</td>
<td>Accounting for Foreign Operations</td>
<td>2</td>
</tr>
<tr>
<td>FIN 3410</td>
<td>Multinational Financial Management</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2420</td>
<td>International Management</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 3630</td>
<td>International Marketing</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3140</td>
<td>Global Perspectives in Real Estate</td>
<td>4</td>
</tr>
<tr>
<td>INTS 1500</td>
<td>Contemporary Issues in the Global Economy</td>
<td>4</td>
</tr>
<tr>
<td>INTS 2370</td>
<td>Global Political Economy</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>International Economics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 3610</td>
<td>International Trade Theory &amp; Policy</td>
<td>4</td>
</tr>
</tbody>
</table>

Secondary Admission
The Daniels College of Business requires a secondary admission process for students interested in pursuing a business major. For most students, the application process and admission decision will occur early in the fall quarter of the sophomore year. A small number of high-achieving students may be granted direct admission to Daniels when accepted to the University of Denver, and transfer students will apply both to the University and to Daniels concurrently.

The selection process is competitive, and admission is not guaranteed. Daniels looks for well-rounded students and embraces diversity and inclusive excellence to create a rich and engaged learning community. A holistic set of criteria will be used to evaluate each applicant in the categories of
init to the Daniels website (http://daniels.du.edu) for specific information related to the admission process and requirements. Students needing special accommodations should contact University Disability Services at dsp@du.edu, 303-871-3939 or www.du.edu/studentlife/disability.

**Degree Checkpoint and Requirements**

Students pursuing BSBA and BSACC degrees must meet Daniels Degree Checkpoints (known as DCB 1 and DCB 2) as part of their programs of study and graduation requirements. These checkpoints serve as collective prerequisites to ensure students have mastered important foundational content and can demonstrate minimum levels of knowledge and skills proficiency to excel in subsequent coursework. Checkpoint requirements include Microsoft Office Certification for Excel, Word, and PowerPoint; specific Daniels and DU coursework, and two assessment to show mastery of course content in courses within the business core. Checkpoints must be closely followed to progress in the business curriculum and to stay on track for graduation. Students may not enroll in courses in the next Checkpoint until they have met all requirements in the prior Checkpoint.

Please note that academic progress and academic advising are the responsibility of the student. To create a plan for positive academic progress, students need to regularly consult with a Daniels academic advisor and become familiar with the appropriate degree plan for their program of study.

**Degree Checkpoint 1**

(all must be satisfactorily completed to move to degree checkpoint 2)

45 credits completed including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSEM 1111</td>
<td>First Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>WRIT 1122</td>
<td>Rhetoric and Academic Writing</td>
<td>4</td>
</tr>
<tr>
<td>WRIT 1133</td>
<td>Writing and Research</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1010</td>
<td>Analytics I: Data Management and Analysis 1</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1020</td>
<td>Analytics II: Business Statistics and Analysis 1</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1020</td>
<td>Introduction to Micro- and Macroeconomics I: History and Theories</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1030</td>
<td>Introduction to Micro- and Macroeconomics II: Theories and Policies</td>
<td>4</td>
</tr>
<tr>
<td>BUS 1000</td>
<td>Gateway to Business</td>
<td>4</td>
</tr>
<tr>
<td>LGST 2000</td>
<td>Foundations of Business Law</td>
<td>4</td>
</tr>
</tbody>
</table>

1 MOS (Microsoft Office) certification is embedded in INFO 1010 and INFO 1020. Students transferring in credits toward INFO 1010 and/or INFO 1020 must meet MOS separately.

**Degree Checkpoint 2**

90 credits completed, including foreign language requirement and the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 2200</td>
<td>Introduction to Financial Reporting</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 2300</td>
<td>Accounting for Decision Making</td>
<td>4</td>
</tr>
<tr>
<td>FIN 2800</td>
<td>Financial Decision Making</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 2800</td>
<td>Introduction to Marketing</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2100</td>
<td>Management and Organizational Behavior</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Students may take up to 8 credits in their major between checkpoint 1 and checkpoint 2.

**BSBA Degree Requirements**

**Total Credits Required for the BSBA: 185**

**Common Curriculum**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Language</td>
<td>4-12</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
</tbody>
</table>
BSBA Degree Requirements

| Scientific Inquiry: The Natural and Physical World | 12 |
| Scientific Inquiry: Society Culture | 8 |
| Advanced Seminar | 4 |

### Additional Non-Business Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1020</td>
<td>Introduction to Micro- and Macroeconomics I: History and Theories</td>
</tr>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>or MATH 1951</td>
<td>Calculus I</td>
</tr>
</tbody>
</table>

All students must complete an international component as approved by their advisor.

### Business Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1000</td>
<td>Gateway to Business</td>
</tr>
<tr>
<td>INFO 1010</td>
<td>Analytics I: Data Management and Analysis</td>
</tr>
<tr>
<td>INFO 1020</td>
<td>Analytics II: Business Statistics and Analysis</td>
</tr>
<tr>
<td>ECON 1030</td>
<td>Introduction to Micro- and Macroeconomics II: Theories and Policies</td>
</tr>
<tr>
<td>LGST 2000</td>
<td>Foundations of Business Law</td>
</tr>
<tr>
<td>ACTG 2200</td>
<td>Introduction to Financial Reporting</td>
</tr>
<tr>
<td>MGMT 2100</td>
<td>Management and Organizational Behavior</td>
</tr>
<tr>
<td>MKTG 2800</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>ACTG 2300</td>
<td>Accounting for Decision Making</td>
</tr>
<tr>
<td>FIN 2800</td>
<td>Financial Decision Making</td>
</tr>
<tr>
<td>INFO 2020</td>
<td>Analytics III: Business Modeling and Analysis</td>
</tr>
<tr>
<td>BUS 1999</td>
<td>Daniels College of Business Checkpoint 1 Assessment</td>
</tr>
<tr>
<td>BUS 2999</td>
<td>Daniels College of Business Checkpoint 2 Assessment</td>
</tr>
<tr>
<td>MGMT 2850</td>
<td>Business and Society</td>
</tr>
<tr>
<td>MGMT 3800</td>
<td>Business Policy and Strategy</td>
</tr>
</tbody>
</table>

### Major Requirements

See section below

### Minor

Although a minor is not required for BSBA students, they may complete any minor (except business administration)

### Electives

Remaining hours of student’s choice

### Total Credits

185

1. this course may be used to fulfill a portion of the Scientific Inquiry: Society and Culture requirement
2. either of these courses may be used to complete the Analytical Inquiry: The Natural and Physical World requirement
3. completed after BUS 1000, INFO 1020, and LGST 2000; students must pass the assessment before registering for MGMT 2850.
4. completed after Checkpoint 2 courses; students must pass the assessment before registering for MGMT 3800.

### Major Requirements

Major requirements generally consist of 32–45 credits. Students should refer to the Degree and Programs of Study (p. 24) section of this bulletin for majors which are applicable to the BSBA.

### Double Major

BSBA students may also complete a double major, combining two of the majors previously listed for the BSBA.

### Upper Division Requirement

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

### General Policies

- In general, a total of 45 credits earned in any major is the maximum allowed toward meeting the minimum 185 credits for the degree.
- At least 50 percent of required business courses for the degree must be completed at the University of Denver.
- Students must earn a minimum GPA of 2.0 ("C") overall, in all business courses and in the major.
- Students must earn a minimum grade of "C-" in their additional non-business and business core requirements.
Residence Requirement

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

Secondary Admission

The Daniels College of Business requires a secondary admission process for students interested in pursuing a business major. For most students, the application process and admission decision will occur early in the fall quarter of the sophomore year. A small number of high-achieving students may be granted direct admission to Daniels when accepted to the University of Denver, and transfer students will apply both to the University and to Daniels concurrently.

The selection process is competitive, and admission is not guaranteed. Daniels looks for well-rounded students and embraces diversity and inclusive excellence to create a rich and engaged learning community. A holistic set of criteria will be used to evaluate each applicant in the categories of academic performance, University engagement, personal character and future potential. Specifically, we seek energized, highly motivated and committed scholars interested in adding to the Daniels community in ways that will leave it a better place for those who follow.

Please refer to the Daniels website (http://daniels.du.edu) for specific information related to the admission process and requirements. Students needing special accommodations should contact University Disability Services at dsp@du.edu, 303-871-3939 or www.du.edu/studentlife/disability.

Degree Checkpoint and Requirements

Students pursuing BSBA and BSACC degrees must meet Daniels Degree Checkpoints (known as DCB 1 and DCB 2) as part of their programs of study and graduation requirements. These checkpoints serve as collective prerequisites to ensure students have mastered important foundational content and can demonstrate minimum levels of knowledge and skills proficiency to excel in subsequent coursework. Checkpoint requirements include Microsoft Office Certification for Excel, Word, and PowerPoint; specific Daniels and DU coursework, and two assessment to show mastery of course content in courses within the business core. Checkpoints must be closely followed to progress in the business curriculum and to stay on track for graduation. Students may not enroll in courses in the next Checkpoint until they have met all requirements in the prior Checkpoint.

Please note that academic progress and academic advising are the responsibility of the student. To create a plan for positive academic progress, students need to regularly consult with a Daniels academic advisor and become familiar with the appropriate degree plan for their program of study.

Degree Checkpoint 1

(all must be satisfactorily completed to move to degree checkpoint 2)

45 credits completed including the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSEM 1111</td>
<td>First Year Seminar</td>
</tr>
<tr>
<td>WRIT 1122</td>
<td>Rhetoric and Academic Writing</td>
</tr>
<tr>
<td>WRIT 1133</td>
<td>Writing and Research</td>
</tr>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>or MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>INFO 1010</td>
<td>Analytics I: Data Management and Analysis</td>
</tr>
<tr>
<td>INFO 1020</td>
<td>Analytics II: Business Statistics and Analysis</td>
</tr>
<tr>
<td>ECON 1020</td>
<td>Introduction to Micro- and Macroeconomics I: History and Theories</td>
</tr>
<tr>
<td>ECON 1030</td>
<td>Introduction to Micro- and Macroeconomics II: Theories and Policies</td>
</tr>
<tr>
<td>BUS 1000</td>
<td>Gateway to Business</td>
</tr>
<tr>
<td>LGST 2000</td>
<td>Foundations of Business Law</td>
</tr>
</tbody>
</table>

1 MOS (Microsoft Office) certification is embedded in INFO 1010 and INFO 1020. Students transferring in credits toward INFO 1010 and/or INFO 1020 must meet MOS separately.

Degree Checkpoint 2

90 credits completed, including foreign language requirement and the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 2200</td>
<td>Introduction to Financial Reporting</td>
</tr>
<tr>
<td>ACTG 2300</td>
<td>Accounting for Decision Making</td>
</tr>
<tr>
<td>FIN 2800</td>
<td>Financial Decision Making</td>
</tr>
<tr>
<td>MKTG 2800</td>
<td>Introduction to Marketing</td>
</tr>
<tr>
<td>MGMT 2100</td>
<td>Management and Organizational Behavior</td>
</tr>
</tbody>
</table>

Note: Students may take up to 8 credits in their major between checkpoint 1 and checkpoint 2.
Student International Experience Requirement

Business students must be prepared to interact with persons from other cultures and to manage in circumstances where business practices and social conventions are different from the student’s native country. To meet this requirement, all students entering DU fall 2006 or thereafter must fulfill an international experience before they can graduate as a business major.

The preference is for a student to study abroad through the Cherrington Global Scholars program, but students may meet this requirement by completing any DU-approved study abroad program (HPM majors must study abroad). If travel is not possible, a student can satisfy this requirement by taking one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 3284</td>
<td>Consolidated Financial Statement</td>
<td>2</td>
</tr>
<tr>
<td>ACTG 3285</td>
<td>Accounting for Foreign Operations</td>
<td>2</td>
</tr>
<tr>
<td>FIN 3410</td>
<td>Multinational Financial Management</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2420</td>
<td>International Management</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 3630</td>
<td>International Marketing</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3140</td>
<td>Global Perspectives in Real Estate</td>
<td>4</td>
</tr>
<tr>
<td>INTS 1500</td>
<td>Contemporary Issues in the Global Economy</td>
<td>4</td>
</tr>
<tr>
<td>INTS 2370</td>
<td>Global Political Economy</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>International Economics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 3610</td>
<td>International Trade Theory &amp; Policy</td>
<td>4</td>
</tr>
</tbody>
</table>

BSCh Degree Requirements

Total Credits Required for the BSCh: 183

Common Curriculum

First-Year Seminar 4
Writing and Rhetoric 8
Language 4-12
Analytical Inquiry: The Natural and Physical World 4
Analytical Inquiry: Society and Culture 8
Scientific Inquiry: The Natural and Physical World 12
Scientific Inquiry: Society and Culture 8
Advanced Seminar 4

Additional Non-Chemistry Requirements

Mathematics, including a year of calculus 20
Physics 15

Major Requirements

See department listing for specific requirements. 60

Minor is not required for the degree but may be completed if desired.

Electives

Electives in science and other fields

Total Credits 183

Major and Minor Requirements

• The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
• Credits in the major and the minor must be earned at the level of “C–” or better.
• At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Upper Division Requirement

• Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA Requirement

• Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.
Residence Requirement
• The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

BScpE Degree Requirements

Total Credits Required for the BScpE: 198

Common Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Writing and Rhetoric</td>
<td>8</td>
</tr>
<tr>
<td>Analytical Inquiry: The Natural and Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Analytical Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Scientific Inquiry: The Natural and Physical World</td>
<td>12</td>
</tr>
<tr>
<td>Scientific Inquiry: Society and Culture</td>
<td>8</td>
</tr>
<tr>
<td>Advanced Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

Mathematics and basic science requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1953 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070 Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080 Calculus of Several Variables</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1010 General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240 General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 1211 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1214 University Physics III for Engineers</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Requirements

Engineering curricula 75-83

Minor

A minor is not required for the degree but may be completed if desired.

Total Credits 198

1 Required for BSME
2 or equivalents

Major and Minor Requirements

• The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
• Credits in the major and the minor must be earned at the level of “C–” or better.
• At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Upper Division Requirement

• Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA requirement

• Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

Residence Requirement

• The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

BSEE Degree Requirements

Total Credits Required for the BSEE: 198

Total credits required for the BSEE with mechatronics concentration: 202

Common Curriculum
First-Year Seminar 4
Writing and Rhetoric 8
Analytical Inquiry: The Natural and Physical World 4
Analytical Inquiry: Society and Culture 8
Scientific Inquiry: The Natural and Physical World 12
Scientific Inquiry: Society and Culture 8
Advanced Seminar 4
Mathematics and basic science requirements
MATH 1951 Calculus I 4
MATH 1952 Calculus II 4
MATH 1953 Calculus III 4
MATH 2070 Introduction to Differential Equations 4
MATH 2080 Calculus of Several Variables 4
CHEM 1010 & CHEM 1240 General Chemistry and General Chemistry Lab 4
PHYS 1211 University Physics I 2 5
PHYS 1212 University Physics II 2 5
PHYS 1214 University Physics III for Engineers 2 4

Major Requirements
Engineering curricula 75-83

Minor
A minor is not required for the degree but may be completed if desired.

<table>
<thead>
<tr>
<th>Total Credits</th>
<th>198-202</th>
</tr>
</thead>
</table>

1 Required for BSME
2 or equivalents

**Major and Minor Requirements**
- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of "C−" or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

**Upper Division Requirement**
- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

**Degree GPA Requirement**
- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

**Residence Requirement**
- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

**BSME Degree Requirements**

**Total Credits Required for the BSME: 192**

**Common Curriculum**
First-Year Seminar 4
Writing and Rhetoric 8
Analytical Inquiry: The Natural and Physical World 4
Analytical Inquiry: Society and Culture 8
Scientific Inquiry: The Natural and Physical World 12
Scientific Inquiry: Society and Culture 8
Advanced Seminar 4
Mathematics and basic science requirements
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>General Chemistry Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>University Physics II</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 1214</td>
<td>University Physics III for Engineers</td>
<td>2</td>
</tr>
</tbody>
</table>

**Major Requirements**

Engineering curricula

| Total Credits | 75-83 |

**Minor**

A minor is not required for the degree but may be completed if desired.

| Total Credits | 192 |

1 Required for BSME
2 or equivalents

**Major and Minor Requirements**

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of "C-" or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

**Upper Division Requirement**

- Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

**Degree GPA Requirement**

- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

**Residence Requirement**

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

**Concurrent and Second Baccalaureate Degree**

**Concurrent Baccalaureate Degree**

Students who wish to pursue two separate undergraduate degrees simultaneously should request an approval form from the Center for Academic and Career Development. A concurrent degree is different than a double major where the majors are within the same degree. Students must work with advisors in both degree areas to establish an academic plan for completing requirements for both degrees. Students should submit the form and their academic plan to the registrar’s office for final approval.

A student who wants to pursue concurrent undergraduate degrees must complete the following:

- a minimum of 228 quarter hours (Note: Certain degrees may require additional hours.)
- all University requirements for both degrees (Common Curriculum requirements need only be completed once, but any unique requirements for each degree program must be met)
- major and minor requirements as defined by the appropriate departments and schools
- academic good standing at the time of graduation (GPA of 2.0 or higher as required by the degree programs)

**Second Baccalaureate Degree**

A student with a bachelor’s degree from an accredited college or university who wants to earn a second bachelor’s degree from the University of Denver must meet normal admission requirements and complete the following:

- residence requirement of at least 45 quarter hours (one year of full-time study)
- major and minor requirements as defined by the appropriate departments and schools
- undergraduate degree requirements (p. 32)
• academic good standing (GPA of 2.0 or higher) at the time of graduation (Note: The accounting program requires a higher GPA.)

Courses taken for the first degree may apply as part of the University of Denver undergraduate requirements for the second degree. Courses previously taken and now being applied to the major or minor are allowed with permission of the chair of the appropriate department. In general, courses used for a minor in the first degree may be built on for a major in the second degree. However, the major in the first degree cannot count as a minor for the second.

Possession of a bachelor’s degree does not automatically fulfill the common degree requirements as defined by the University.

University College Bachelor of Arts Completion Program

Program Outcomes

The Bachelor of Arts Completion Program was developed with the input of business, government and community leaders, and was designed to bring about learning outcomes critical for your success at work and in living a satisfying and productive life. According to the National Association of Colleges and Employers, the top skills and qualities sought in job candidates by employers include verbal communication skills, strong work ethic, teamwork skills, analytical skills and initiative. These skills are developed in the Bachelor of Arts Completion Program, through six critical outcomes that will have a lasting effect throughout your career and personal life:

• Creativity: the ability to conceptualize and rework problems and to generate solutions to those problems
• Critical thinking: the skill of analyzing and defining issues, developing an appreciation for multiple viewpoints and generating well-crafted arguments
• Knowledge utilization: the ability to find useful information, ideas, concepts and theories; to synthesize them and build on them; and to apply them in the workplace as well as personal life
• Decision making: the ability to analyze options and outcomes for decisions in terms of their values and effects and to make decisions that are rational, legal and ethical
• Empowerment: the confidence that comes from knowing how to act, when to act and how to respond to the opportunities and constraints that affect your efforts to get things done. With a sense of empowerment comes the ability to lead and to bring about change for the good
• Effective communication: knowing your audience and learning how to empathize with it; reading, writing, and speaking effectively; making presentations that are persuasive and entertaining; and arguing to powerful effect

Admission

Admission criteria

Candidates for the Bachelor of Arts Completion Program are evaluated based on the following criteria. Entrance exams such as the ACT and SAT are not required.

1. Applicants must have completed 40 quarter hours (27 semester hours) of transferable credits in academic subjects. Applicants with between 40 and 44 quarter hours of total college credit earned must also submit high school transcripts or official verification of the High School Equivalency Diploma (GED).
2. Transfer credit consideration is based on the following: the subject matter, the institution where the credits were earned and the course grade. Although certain occupational or technical courses may not transfer, no time limit applies to the courses that do transfer. Only courses where a grade of C (2.0) or better was earned will be eligible for transfer.
3. Applicants must have at least three years of work experience beyond high school. Preference will be given to candidates with more than three years work with substantial and increasing levels of responsibility.
4. The applicant’s academic and professional commitments and written language skills are evaluated through the Statement of Purpose and Commitment, submitted as part of the admission application.
5. We consider special situations or circumstances that may have influenced previous academic performance; applicants should address these in their admission essay.

Students residing in Minnesota only: In compliance with the State Authorization Act (p. 8) for Minnesota, students enrolled in an online bachelor’s program at the University of Denver must adhere to Minnesota Degree Standards. Bachelor of arts degree programs must include 60 quarter credits distributed across the following four areas: Communication (minimum of 8 quarter hours), Natural Sciences/Mathematics, Humanities, and Social Sciences (minimum of 12 quarter hours each). Admission to the Bachelor of Arts Completion Program will require minimum standards are met through a combination of University College credits and transfer credits.

Admission Process

Bachelor of Arts Completion Program applications are reviewed for admission on a quarterly basis. Applications and all supplemental materials must be submitted online, with the exception of transcripts, which must be received by the stated application deadline (requests for accommodation may be granted). Applicants will be notified of a decision via email and standard mail approximately two weeks following the application deadline. Detailed
application information and application deadlines are located on the University College website (http://universitycollege.du.edu/answers/admission/bachelors.cfm).

- **Application**: Applicants must complete the application online (https://myweb.du.edu).
- **Application Fee**: A $75 non-refundable application fee is required for an application to be processed.
- **One Official Transcript from each Post-Secondary Institution**: Applicants are required to submit an official transcript from each post-secondary institution they have attended, or are presently attending, where two quarter hours (or one semester hour) or more were completed. This includes transcripts for credit earned as transfer work and study abroad.
- **Statement of Purpose and Commitment**: A personal statement (two pages double spaced) is required. The statement should include information on how the degree will enhance career plans and meet educational goals. Sharing personal experiences, abilities, achievements and goals is encouraged. This document has considerable influence in the decision to admit applicants with attention given to written communication skills.
- **Résumé/Curriculum Vitae (CV)**.
- **Language Proficiency**: Applicants whose native language is not English or who have been educated in countries where English is not the native language, regardless of citizenship, must provide official scores from the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS). The TOEFL and IELTS scores are valid for two years from the test date. Applicants may be exempt from English proficiency test requirements if they have earned a post-secondary degree from a recognized/accredited university where the language of instruction and examination is English.
- **Proof of Permanent Residency**: Permanent Residents must provide a copy of their Registration Alien Card (green card).
- **Admission Interview**: An interview may be required at the program director’s request.

### International admission

**Admission Standards for International Students**

In addition to meeting all University of Denver admission requirements, non-native speakers of English must present proof of English proficiency. The University requires a minimum score of 80 IBT (Internet-based) on the Test of English as a Foreign Language (TOEFL) or a score of 6.5 with no band scores below 6.0 on the International English Language Testing System (IELTS) and with at least 20 on all subscores. No institutional TOEFL scores will be accepted.

Students who are non-native speakers of English and have not yet completed 30 transferrable academic semester/university credits at an institution where English is the language of instruction and examination will be required to take the English Language Proficiency Assessment (ELPA) during international student orientation. For traditional undergraduate students, the results of the assessment will determine placement into one of the required First-Year Seminars and, if necessary, placement into additional bridge courses for which students will receive elective credit toward their degree. ELPA results may also require students to enroll in the full-time intensive English program at DU’s English Language Center (ELC), regardless of TOEFL or IELTS scores. In this case, the student will remain enrolled in the ELC program until he or she has successfully completed the program, after which the student may enroll in his or her degree program.

Exemptions: Students are generally exempt from the English proficiency test requirement if they have any of the following:

- secondary/high school diploma from a school where the language of instruction is English
- 30 semester credits of coursework from a university or college where English is the sole language of instruction and examination
- IGCSE/GCSE grade of A or B on the English examination
- HKCEE grade of A or B on the English examination syllabus B
- HKDSE level of 5 on the English Language Core Subject examination

English Conditional Admission (ECA): Students who are academically admissible to the University of Denver, but lack the English proficiency necessary to begin academic classes, may be ECA admitted. These conditionally admitted students must either submit a TOEFL/IELTS score that meets the minimum requirements or pass, with satisfactory results, the college-preparation level of English at the University of Denver’s English Language Center.

Contact the English Language Center by mail: 1958 S. Josephine St., Denver, CO 80208-9300; telephone: 303-871-3075; fax: 303-871-6622; or email: elc@du.edu. Completion of an intensive English program other than that offered by the University of Denver’s English Language Center does not satisfy this requirement. Note that admission to the English Language Center does not automatically grant admission to University of Denver degree programs.

For more information regarding admission for international students, contact the University of Denver Office of International Admission by mail: 114 University Hall, 2197 S. University Blvd., Denver, CO 80208-9401; telephone: 303-871-2790; fax: 303-871-3522; email: INTLADM@du.edu; or web: http://www.du.edu/apply/admission/apply/international/.

### Bachelor of Arts Completion Program Degree Requirements

**Common Learning Experience**

The Common Learning curriculum includes ten carefully selected courses in five areas where we believe students can sharpen their skills and develop essential knowledge needed for thriving in the information age. These are not 101 courses, but instead a set of interdisciplinary courses for people who...
have been in the working world and are highly motivated. Interdisciplinary simply means that the perspectives and materials of several disciplines have been brought together in the design of each course. Because all students in the program will take these courses, they will have a common foundational experience so instructors in advanced courses can assume they have attained a specific level of knowledge. The Common Learning Experience will help students learn how to learn, which will serve them in their future academic careers.

The Experience with your major

The major builds on the Common Learning Experience but provides a way for students to specialize and pursue their own interests. In most colleges and universities the major is synonymous with studying in an academic discipline, but at University College your major is interdisciplinary; it draws on several disciplines especially useful for exploring the topics in that major. Students will become conversant with key knowledge in the arts and sciences disciplines, but it will be packaged in a way that helps them to examine key topics in an interdisciplinary field of study. The chief purpose of the major is to provide opportunities for learning how to draw on various liberal arts disciplines for addressing real world problems of organizations and society.

There are five majors from which to choose:

- Communication Arts (p. 380)
- Environmental Studies (p. 382)
- Global Commerce and Transportation (p. 383)
- Global Studies (p. 384)
- Information Technology (p. 386)
- Leadership and Organization Studies (p. 387)

Students may have started on a major in earlier studies, but those courses that transfer will be treated as electives—they do not need to match any of that work with the student’s new major. Keep in mind that none of these majors provide an industry-specific specialization such as marketing, human resources or project management. We believe that such specializations are more appropriate at the graduate level, and we hope that bachelor’s students will continue in their studies with us or elsewhere. Each major does provide, however, a slightly different set of skills and knowledge relevant to different aspects of the world of work. Each major contains important opportunities for students to relate their studies to their interests and provides three opportunities for them to design experiences that fit their interests.

- The independent study project allows students to follow up on topics of special interest generated in courses.
- The service learning project encourages students to craft a personal experience around their interests to provide needed help in some aspect of the community.
- The integrative project provides an opportunity to conduct an organization-based study, creative project or extended essay in any area of interest or on a topic that adds value to the student’s organization.

The following academic policies apply to major requirements for bachelor’s students at the University.

- The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
- Credits in the major and the minor must be earned at the level of “C–” or better.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Bachelor of Arts

Total Credits Required for the BA: 180

<table>
<thead>
<tr>
<th>Transfer Course Work</th>
<th>40-135</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACP 2050</td>
<td>Writing Workshop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Common Learning Experience (40 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 2050</td>
</tr>
<tr>
<td>CA 2100</td>
</tr>
<tr>
<td>LOS 2050</td>
</tr>
<tr>
<td>LOS 2100</td>
</tr>
<tr>
<td>PPSS 2050</td>
</tr>
<tr>
<td>PPSS 2100</td>
</tr>
<tr>
<td>ST 2050</td>
</tr>
<tr>
<td>ST 2100</td>
</tr>
<tr>
<td>GS 2050</td>
</tr>
<tr>
<td>GS 2100</td>
</tr>
</tbody>
</table>

| Major Requirements | 40 |

52 Bachelor of Arts
Planned program of courses

Electives

Remaining credits to meet minimum 180 for the degree

Total Credits

Major Requirements

• The GPA in the major and the minor must be at least 2.0 with the exception of the bachelor of science in accounting which requires a GPA of at least 2.5.
• Credits in the major and the minor must be earned at the level of “C–” or better.
• At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.

Upper Division Requirement

• Of the total credits required for the degree, at least 75 must be upper-division courses at the 2000- or 3000-level.

Degree GPA Requirement

• Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.

Residence Requirement

• The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.

Credit Earned through Examinations

A maximum of 45 quarter hours can be awarded for all AP and IB credit.

Advanced Placement (AP)

Through the College Entrance Examination Board (CEEB) program, the University of Denver grants credit to secondary school students who complete an AP examination with appropriate scores. Placement and/or credit is granted in courses commonly taught at the first-year level. Departments of the University vary in their score requirements for credit and placement. The following table identifies the amount and placement of AP credit.

<table>
<thead>
<tr>
<th>AP score</th>
<th>5</th>
<th>4</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>8 credits (ARTH 2801, ARTH 2802)</td>
<td>4 credits (ARTH 2801)</td>
<td></td>
</tr>
<tr>
<td>Studio Arts (2D, 3D, Drawing)</td>
<td>5 credits (elective)</td>
<td>4 credits (elective)</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>12 credits (BIOL 1010, BIOL 1020, BIOL 1011, BIOL 1021, elective)</td>
<td>5 credits (BIOL 1010, BIOL 1020)</td>
<td></td>
</tr>
<tr>
<td>Calculus BC</td>
<td>12 credits (MATH 1951, MATH 1952, MATH 1953)</td>
<td>8 credits (MATH 1951, MATH 1952)</td>
<td>w/AB subscore 4 or 5: 4 credits (MATH 1951)</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4 credits (MATH 1951)</td>
<td>4 credits (MATH 1951)</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>12 credits (CHEM 1010, CHEM 1240, elective)</td>
<td>8 credits (CHEM 1010, CHEM 1240, elective)</td>
<td></td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>8 credits (COMP 1672, elective)</td>
<td>8 credits (COMP 1671, elective)</td>
<td></td>
</tr>
<tr>
<td>Computer Science A</td>
<td>8 credits (COMP 1672, elective)</td>
<td>4 credits (COMP 1671)</td>
<td></td>
</tr>
<tr>
<td>Economics, Macro</td>
<td>4 credits (ECON 1020)</td>
<td>4 credits (ECON 1020)</td>
<td></td>
</tr>
<tr>
<td>Economics, Micro</td>
<td>4 credits (ECON 1030)</td>
<td>4 Credits (ECON 1030)</td>
<td></td>
</tr>
<tr>
<td>English Language</td>
<td>8 credits (WRIT 1122, elective)</td>
<td>4 credits (WRIT 1122)</td>
<td>Advanced Standing (see Writing Program)</td>
</tr>
<tr>
<td>English Literature</td>
<td>8 credits (WRIT 1122, ENGL 1110)</td>
<td>4 credits (ENGL 1110)</td>
<td>Advanced Standing (see Writing Program)</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4 credits (GEOG 1201)</td>
<td>4 credits (GEOG 1201)</td>
<td></td>
</tr>
<tr>
<td>Foreign Language or Foreign Literature</td>
<td>12 credits (language elective)</td>
<td>8 credits (language elective)</td>
<td>4 credits (language elective)</td>
</tr>
<tr>
<td>Geography, Human</td>
<td>8 credits (GEOG 1410, elective)</td>
<td>4 credits (GEOG 1410)</td>
<td></td>
</tr>
<tr>
<td>History (US, European and World)</td>
<td>8 credits (elective)</td>
<td>4 credits (elective)</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>8 credits (MUAC elective)</td>
<td>8 credits (MUAC elective)</td>
<td></td>
</tr>
<tr>
<td>Physics 1</td>
<td>5 credits (PHYS 1111)</td>
<td>5 credits (PHYS 1111)</td>
<td></td>
</tr>
<tr>
<td>Physics 2</td>
<td>5 credits (PHYS 1113)</td>
<td>5 credits (PHYS 1113)</td>
<td></td>
</tr>
</tbody>
</table>
### Credit Earned through Examinations

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits (Codes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 1 and 2</td>
<td>15 credits (PHYS 1111, PHYS 1112, PHYS 1113)</td>
</tr>
<tr>
<td>Physics B</td>
<td>10 credits (PHYS 1111, PHYS 1113)</td>
</tr>
<tr>
<td>Physics C (Mechanics only)</td>
<td>5 credits (PHYS 1211)</td>
</tr>
<tr>
<td>Physics C (E &amp; M only)</td>
<td>5 credits (PHYS 1213)</td>
</tr>
<tr>
<td>Physics C (Mech and E &amp; M)</td>
<td>10 credits (PHYS 1211, PHYS 1213)</td>
</tr>
<tr>
<td>Political Science (US. Govt./Pol)</td>
<td>4 credits (PLSC 1610)</td>
</tr>
<tr>
<td>Political Science (Comp Govt./Pol)</td>
<td>4 credits (PLSC 1610)</td>
</tr>
<tr>
<td>Psychology</td>
<td>8 credits (PSYC 1001, 1XXX)</td>
</tr>
<tr>
<td>Statistics</td>
<td>4 credits (INFO 1020)</td>
</tr>
</tbody>
</table>

1. Students may only receive credit for one exam.
2. Fulfills Scientific Inquiry-Natural Requirement.
3. Carries Analytical Inquiry-Society credit though not equivalent to a University course.

### International Baccalaureate (IB)

Students may receive college credit through the IB program, which is offered at many high schools. Higher-level subject exams may be awarded credit. With the exception of foreign language, no credit is given for standard-level subject exams. The number of credits awarded varies depending on the subject area. The amount and placement of IB credit is summarized in the following table.

<table>
<thead>
<tr>
<th>IB Score</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art: Visual Arts</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
<td>4 credits (elective)</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>12 credits(^2) (BIOL 1010, BIOL 1020, BIOL 1011, BIOL 1021, elective)</td>
<td>12 credits(^2) (BIOL 1010, BIOL 1020, BIOL 1011, BIOL 1021, elective)</td>
<td>5 credits (BIOL 1010, BIOL 1020)</td>
<td></td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>8 credits (MGMT 2000, upper-division elective)</td>
<td>8 credits (MGMT 2000, upper-division elective)</td>
<td>8 credits (MGMT 2000, upper-division elective)</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>12 credits(^2) (CHEM 1010, CHEM 1240, elective)</td>
<td>12 credits(^2) (CHEM 1010, CHEM 1240, elective)</td>
<td>8 credits (CHEM 1010, CHEM 1240, elective)</td>
<td></td>
</tr>
<tr>
<td>Computing Studies</td>
<td>Not currently approved for credit</td>
<td>Not currently approved for credit</td>
<td>Not currently approved for credit</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>8 credits (ECON 1020, ECON 1030)</td>
<td>8 credits (ECON 1020, ECON 1030)</td>
<td>4 credits (ECON 1030)</td>
<td></td>
</tr>
<tr>
<td>English A: Language and Literature</td>
<td>4 credits (WRIT 1122)</td>
<td>4 credits (WRIT 1122)</td>
<td>4 credits (WRIT 1122)</td>
<td>Advanced standing</td>
</tr>
<tr>
<td>English A: Literature</td>
<td>4 credits (WRIT 1122)</td>
<td>4 credits (WRIT 1122)</td>
<td>4 credits (WRIT 1122)</td>
<td>4 credits (WRIT 1122)</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4 credits (GEOG 1201)</td>
<td>4 credits (GEOG 1201)</td>
<td>4 credits (GEOG 1201)</td>
<td>4 credits (GEOG 1201)</td>
</tr>
<tr>
<td>Film</td>
<td>8 credits (MFJS 2000, elective)</td>
<td>8 credits (MFJS 2000, elective)</td>
<td>4 credits (MFJS 2000, elective)</td>
<td>4 credits (MFJS 2000, elective)</td>
</tr>
<tr>
<td>Foreign Language (A2 or B)(^4)</td>
<td>12 credits (language elective)</td>
<td>12 credits (language elective)</td>
<td>8 credits (language elective)</td>
<td>4 credits (language elective)</td>
</tr>
<tr>
<td>Geography</td>
<td>8 credits (GEOG 1410, elective)</td>
<td>8 credits (GEOG 1410, elective)</td>
<td>4 credits (GEOG 1410)</td>
<td>4 credits (GEOG 1410)</td>
</tr>
<tr>
<td>History (Americas, Europe or Africa, Islamic)(^1)</td>
<td>4 credits(^3) (elective)</td>
<td>4 credits(^3) (elective)</td>
<td>4 credits(^3) (elective)</td>
<td></td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>12 credits (MATH 1951, MATH 1952, MATH 1953)</td>
<td>12 credits (MATH 1951, MATH 1952, MATH 1953)</td>
<td>8 credits (MATH 1951, MATH 1952)</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>8 credits (MUAC elective)</td>
<td>8 credits (MUAC elective)</td>
<td>8 credits (MUAC elective)</td>
<td>8 credits (MUAC elective)</td>
</tr>
<tr>
<td>Philosophy</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
</tr>
<tr>
<td>Physics</td>
<td>10 credits (PHYS 1211, PHYS 1213)</td>
<td>10 credits (PHYS 1211, PHYS 1213)</td>
<td>10 credits (PHYS 1211, PHYS 1213)</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>8 credits (PSYC 1001, elective)</td>
<td>8 credits (PSYC 1001, elective)</td>
<td>4 credits (PSYC 1001)</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Cultural Anthropology</td>
<td>8 credits (ANTH 1010, elective)</td>
<td>8 credits (PSYC 1001, elective)</td>
<td>4 credits (PSYC 1001)</td>
<td></td>
</tr>
<tr>
<td>Theatre Arts</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
<td>8 credits (elective)</td>
</tr>
</tbody>
</table>
Students may only receive credit for one exam.
Fulfills Scientific Inquiry-Natural & Physical World requirement.
Carries Analytical Inquiry-Society credit though not equivalent to a University course.
Credit awarded for standard-level exams.

Transfer of Credit

University of Denver Undergraduate Transfer of Credit Policy

Purpose
The University ensures that transparency in our policies exists for our students and those who administer these policies, allowing for consistent interpretation and application throughout the institution and, as new types of learning opportunities emerge, allowing for responsiveness on the part of the University in a changing educational environment.

Policy
Three general factors affect the transferability of credits: the subject matter, the institution where the credits were earned and the course grade.

Subject Matter
Usually, courses taken in baccalaureate disciplines taught at the University of Denver are readily transferable. Credits from professional programs will be examined on a course-by-course basis and are often transferable. In general, courses in vocational or occupational subjects are not transferable. Finally, applicability to the degree for which a student is a candidate and comparability to an existing University of Denver course may be used as factors for the acceptance or denial of transfer credit.

Transferring Institution

Domestic Institutions
Credit will be considered for courses taken at institutions that are accredited by an agency recognized by the U.S. Department of Education. Credits are more readily accepted from a collegiate institution with regional accreditation although credits earned at a collegiate institution with national or special accreditation will also be considered. Credits that meet the subject matter requirements will be considered on a course-by-course basis when earned at an institution lacking regional accreditation. Institutions that have been granted official candidacy status by a regional accrediting association will be accorded like treatment to those that are fully accredited.

Foreign Institutions
Credit will be considered for courses taken at foreign institutions that are formally recognized as an institution of higher education by a given country’s Ministry of Education. The same general parameters apply for course content and grades as they do for U.S. credit consideration.

Two-Year Institutions
Credit from two-year institutions generally is considered lower division. Advanced courses from two-year institutions are considered upper division when validated by the chairs of the appropriate departments. The maximum credit that may be accepted from a two-year institution is 90 quarter hours.

Study Abroad
Credit earned within non-DU study abroad programs is treated as transfer credit.

Military Courses
Military courses documented through Army/American Council on Education Registry Transcript System (AARTS), Form DD 295, “Application for the Evaluation of Learning Experiences During Military Service,” or DD Form 214, “Armed Forces of the United States Report of Transfer or Discharge,” may be eligible for consideration in the evaluation process. Military courses must be validated by the department with which the subject matter is most closely aligned.

Course Grades
Only courses where a grade of C (2.0) or better was earned will be eligible for transfer. A grade of C- (1.7) or below will not transfer. Transfer grades are not included in a student’s DU GPA, and transfer credits cannot be used to reduce DU grade-point deficiencies. Students majoring in accounting may transfer accounting courses without validating tests only if they are recorded with grades of “B” or better. Credit earned as pass/fail can be transferred only as elective credit. This credit does not apply to specific degree requirements other than total hours for graduation, and the University must determine that “P” (pass) equals 2.0 or better performance.
Instructional Methodologies
Online courses and those offered electronically are not categorically restricted, but they may be refused based on instruction methodologies not equivalent to those at the University of Denver.

Maximum Transfer Hours and Residency Requirements
The following specific transfer guidelines regarding residency and maximum transfer hours apply:

- A maximum of 135 quarter hours of credit may be transferred.
- The final 45 credits must be earned at the University of Denver.
- For students studying for one or more terms in an approved study abroad program, the residency requirement is waived.
- At least 50 percent of the required credits for the major and the minor must be completed at the University of Denver.
- At least 50 percent of required business credits for undergraduate business degrees must be completed at the University of Denver.

AP and IB Credit
A maximum of 45 quarter hours can be awarded for all AP and IB credit.

Authority and Course Equivalencies
Initial transferability decisions are made by the Office of the Registrar. Approval of transfer applies toward the overall credit needed to meet degree requirements and does not necessarily guarantee or result in equivalency with specific University courses or requirements. Transfer credit appeals may be made through departmental chairs. Final authority for transfer credit and determination of course equivalency rests with the appropriate academic department.

Transfer of Credit by Continuing Students
Approval
Continuing students must receive approval in advance for transfer credit.

Concurrent Registration
Students may not enroll at the University of Denver and other institutions concurrently without prior permission.

Articulation Agreements
The University of Denver may enter into transfer articulation agreements with other institutions as deemed mutually beneficial. Such agreements are administered by the Office of the Registrar. Transfer articulation agreements will include transfer course guides. The University of Denver may establish transfer course guides independent of formal articulation agreements.

Determination of Quarter Hour Equivalent Value Assigned
University transfer credit hour values are based on the credit hour value assigned by the originating institution. If the academic calendar of the originating institution is other than the quarter system, the appropriate conversion of the assessed credit hours of coursework will take place based on the calendar of the originating institution and the formula for converting them to quarter credit hours. While semester hours are multiplied by 1.5 to convert them to quarter hours, other formulae are used for the conversion when the originating institution is not on a standard, quarter/semester calendar. Conversion of the assessed credit hours from institutions on calendars other than a quarter calendar may result in conversions other than whole quarter credits (e.g., 3 semester credits is the equivalent of 4.5 quarter credits); conversions are not rounded up or down.

Requests for Transfer Transcript
Students must request that official transcripts be mailed directly from other institutions and sent to the Office of the Registrar. All transcripts must be received in an official sealed envelope. Student will be notified after transcripts have been processed.

Transfer and International Education Reporting System
The University of Denver’s Transfer and International Education Reporting System (http://myweb.du.edu/mb/du_bwcktar.P_DU_Choose_Geog_Area) (TIERS) allows students to access a list of approved transfer and study abroad courses. Courses that do not appear in the system are not necessarily unacceptable for transfer. Courses will continue to be added as new ones are evaluated and equivalents determined. You can access TIERS through PioneerWeb under the Student tab.
Major and Minor Requirements and Course Descriptions

• Traditional Bachelor's Program Majors and Minors (p. 58)
  • Advanced Seminar (p. 62)
  • Air Force Aerospace Studies (p. 69)
  • Army Reserve Officers' Training Corps (AROTC) (p. 77)
  • Asian Studies (p. 90)
  • Business Administration (p. 111)
  • Department of Anthropology (p. 70)
  • Department of Biological Sciences (p. 93)
  • Department of Business Ethics and Legal Studies (p. 256)
  • Department of Business Information and Analytics (p. 112)
  • Department of Chemistry and Biochemistry (p. 116)
  • Department of Communication Studies (p. 128)
  • Department of Computer Science (p. 135)
  • Department of Economics (p. 141)
  • Department of English (p. 179)
  • Department of Finance (p. 186)
  • Department of Geography and the Environment (p. 193)
  • Department of History (p. 206)
  • Department of Languages and Literatures (p. 237)
  • Department of Management (p. 258)
  • Department of Marketing (p. 261)
  • Department of Mathematics (p. 266)
  • Department of Media, Film and Journalism Studies (p. 270)
  • Department of Philosophy (p. 310)
  • Department of Physics and Astronomy (p. 317)
  • Department of Political Science (p. 326)
  • Department of Psychology (p. 332)
  • Department of Religious Studies (p. 348)
  • Department of Sociology and Criminology (p. 358)
  • Department of Theatre (p. 367)
  • Emergent Digital Practices (p. 145)
  • Engineering (p. 152)
  • First-Year Seminar (p. 188)
  • Franklin L. Burns School of Real Estate & Construction Management (p. 343)
  • Fritz Knoebel School of Hospitality Management (p. 215)
  • Gender and Women's Studies (p. 189)
  • Innovation and Entrepreneurship (p. 218)
  • Institute for Public Policy Studies (p. 340)
  • Integrated Sciences (p. 220)
  • Intercultural Global Studies (p. 220)
  • Josef Korbel School of International Studies (p. 222)
  • Judaic Studies (p. 232)
  • Lamont School of Music (p. 280)
  • Leadership Studies Program (p. 254)
  • School of Accountancy (p. 58)
  • School of Art and Art History (p. 78)
  • Social Justice Living and Learning Community (p. 356)
  • Socio-Legal Studies (p. 357)
Traditional Bachelor's Program Majors and Minors

Most majors, and some minors, may only be pursued in conjunction with specific degree programs. The Degrees and Programs of Study (p. 24) section of this bulletin lists possible degree and major/minor combinations. Students must meet overall requirements for their degree as well as specific requirements outlined in majors and minors.

School of Accountancy

Office: Daniels College of Business, Suite 355
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-2032
Web Site: http://daniels.du.edu/accountancy/

The School of Accountancy’s mission is to foster Enlightened Practice, Professional Achievement, Knowledge Creation and a Commitment to Community among its students, graduates, faculty and others engaged in the accounting profession and related disciplines.

- **Enlightened Practice** means ensuring that our graduates understand the theory and practice of accounting and its ramifications on society, the profession and organizations.
- **Professional Achievement** includes accomplishment at each level of one’s career and commitment to lifelong learning, competence and integrity.
- **Knowledge Creation** means scholarship which improves our understanding of accounting, the practice of accounting and the process of educating future accountants.
- **Commitment to Community** is the process of giving of oneself both to the community that supports one’s efforts and achievements and to the community at large. **Commitment to Community** is a vital aspect of the accounting profession and is critical to the School’s ongoing success.

Our programs achieve this mission by emphasizing technical knowledge and analytical ability, interpersonal skills and intercultural understanding, and ethically based leadership and social responsibility. In the School of Accountancy, students learn to integrate accounting concepts and business applications in the context of communication, ethics, values and technology. This integration is accomplished in the undergraduate business core and in the School of Accountancy core.

The School of Accountancy’s strengths include the following:

- an established reputation as a provider of quality programs
- highly qualified faculty who emphasize teaching and relevant research
- student access to faculty—both individually and in relatively small classes
- innovative curricula
- emphasis on state-of-the-art technology throughout the curricula
- emphasis on practical experience
- a rigorous educational experience

The degree prepares students to work as strategic business advisors who can analyze and understand today’s complex business environment. Students gain expertise in the traditional accounting arenas of managerial accounting, financial reporting, systems, auditing and tax, as well as in the nontraditional areas of technology, marketing, strategic planning and finance. The School of Accountancy offers a bachelor of science in accounting (BSAcc), a master of accountancy (MAcc) and a dual degree option that allows completion of the bachelor’s and master’s degrees in five years.

Refer to the appropriate sections of this bulletin for the admission, retention and graduation requirements for the School of Accountancy, which differ from the general requirements of the Daniels College of Business.
Program Objectives

Objectives of the BSAcc are to prepare students for entry-level positions in accounting. In this program, students will learn how to

1. prepare and interpret financial statements for business enterprises;
2. use accounting data to evaluate performance and enable decision-making;
3. apply the principles related to the design, integrity and effectiveness of accounting information systems;
4. explain the role of auditing in society, including auditing procedures and reporting requirements;
5. apply federal tax laws pertaining to individuals; and
6. Analyze the legal, ethical and legislative constructs that govern the conduct of business.

Criteria for Admission to the BSAcc Program

Continuing Students

- Students must have junior status.
- Students must have a minimum 2.5 GPA (overall and in the following courses: ACTG 2200, FIN 2800 and ACTG 2300).
- If a student fails to meet the required GPA, he or she may still be able to qualify for the School of Accountancy. Please consult with the director of the School of Accountancy.
- Other specific admission requirements apply. Please see the School of Accountancy for details.

Transfer Students

Undergraduate transfer students must meet the requirements listed for continuing students. Credits are considered for transfer only if they meet the following standards:

- A minimum grade of “B” must be earned in each accounting course.
- Accounting courses beyond principles must be taken at an AACSB-accredited institution or approved by the School of Accountancy.
- Courses must be comparable to required courses offered in the School of Accountancy. Any required courses that do not meet the above criteria must either be validated by examination or retaken. In computing the GPA for purposes of admission to the School of Accountancy, work transferred from previous schools and work at the University of Denver are included.

Retention Requirement for Bachelor of Science in Accounting

To remain in the program, a student must maintain a GPA of 2.5 or higher, both overall and in accounting courses.

Accounting

Bachelor of Science in Accounting Major Requirements

Minimum of 43 credits. Students must earn a minimum 2.5 GPA, both overall, in all business courses, and in accounting courses. If a GPA deficiency exists at the time the prescribed program is completed, no more than 10 credits of approved additional accounting courses and non-accounting courses may be taken in an attempt to correct the deficiency.

Accounting Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 3016</td>
<td>Accounting Core I - Accounting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ACTG 3018</td>
<td>Intermediate Financial Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3019</td>
<td>Cost Management</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3036</td>
<td>Accounting Core II - Federal Income Taxation</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3038</td>
<td>Accounting Core II - Intermediate Financial Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3049</td>
<td>Accounting Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3068</td>
<td>Intermediate Financial Accounting III</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3069</td>
<td>Accounting Communications</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3551</td>
<td>Auditing</td>
<td>4</td>
</tr>
</tbody>
</table>

Additional Accounting Courses

Select 8 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 3462</td>
<td>Corporate &amp; Partnership Tax</td>
</tr>
<tr>
<td>ACTG 3607</td>
<td>Not-For-Profit and Governmental Accounting</td>
</tr>
<tr>
<td>ACTG 3284</td>
<td>Consolidated Financial Statement</td>
</tr>
</tbody>
</table>
Core in Accountancy

The core in accountancy is a yearlong, fully integrated series of courses of 11-12 credits each quarter, for a total of 35 credits. Each quarter must be completed in its entirety before the student can move on to the next quarter. Any student with an ACTG GPA below 2.5 at the end of the third quarter will not be permitted to continue in the accounting major. Both accounting and non-accounting subjects are covered in the core. The accounting material includes courses in cost and managerial accounting, financial reporting, systems, tax, auditing and accounting research. Non-accounting material includes oral and written communications, technology, ethics and legal issues. Classes in the core normally are completed during the junior year.

Minor Requirements

The Accounting minor is available only to students pursuing a Bachelor of Science in Business Administration degree.

16 credits, including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 3220</td>
<td>Understanding Financial Statements</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3440</td>
<td>Business and Investment Tax Issues</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3360</td>
<td>Profit, Planning &amp; Control</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 3230</td>
<td>Financial Statement Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 16

Finance majors must substitute an advisor-approved accounting course for ACTG 3220 Understanding Financial Statements. ACTG 3462 Corporate & Partnership Tax is recommended.

Undergraduate/Graduate Dual Degree Program in Accounting

The School of Accountancy offers undergraduates an accelerated program leading to the master of accountancy (MAcc). Students may apply for admission to the graduate program after completing the junior accounting core. Admission is based on academic performance, interview, GMAT scores and reference letters. Students accepted to the program may complete the BSAcc and MAcc in a total of five years.

Courses

ACTG 2010 Survey of Accounting (4 Credits)
Accounting for running a business, with modules on financial accounting and a focus on managerial accounting. Prerequisite: Sophomore standing. Business minors only.

ACTG 2200 Introduction to Financial Reporting (4 Credits)
The purpose of this course is to introduce students to accounting and its relevance in the business world. Students learn how to analyze transactions and prepare financial statements. In addition, students are introduced to publicly traded company's annual reports and 10k's. Prerequisite: degree checkpoint 1.

ACTG 2300 Accounting for Decision Making (4 Credits)
Introduces or reinforces concepts and techniques for using accounting information for managerial purposes. The focus is on interpreting financial information and making business decisions, not accumulating or preparing accounting information. Prerequisites: degree checkpoint 1 and ACTG 2200.

ACTG 2992 Directed Study (1-10 Credits)

ACTG 3016 Accounting Core I - Accounting Fundamentals (3 Credits)
This course focuses on the fundamental elements and terminology of business transactions and related financial accounting; the accounting systems or recording, classifying, and summarizing information; accounting as a profession; economic and ethical issues relating to financial accounting; and the skills necessary for the professional accountant. The course is designed to prepare future accountants to understand how the accounting system functions within the larger environment of business. This course is an accounting workshop with students doing problems, exercises, and participating in class discussions. Prerequisite: degree checkpoint 1.

ACTG 3018 Intermediate Financial Accounting I (4 Credits)
Foundations of financial statement content, including structure of financial accounting theory; accounting process and cycle; income determination and reporting; compound interest concepts and relationship to accounting; accounting and reporting for current assets. Case studies of open-ended accounting problems requiring application of GAAP guidance to fact patterns. Prerequisite: degree checkpoint 2.

ACTG 3019 Cost Management (4 Credits)
This course introduces objectives, methods and problems encountered in cost accounting. Cost accounting is a broad field that often links financial and management accounting, involving communication between accountants and management. Prerequisite: DCB checkpoint 2.
ACTG 3036 Accounting Core II - Federal Income Taxation (4 Credits)
This is the first course in taxation which introduces the federal taxation system, the importance of tax authorities, the concepts of gross income and tax deductions and the tax implications of common property transactions. This course generally focuses on property transactions, but the taxation of individuals is emphasized with an objective being that students are able to properly prepare complex individual tax returns. Prerequisites: ACTG 3016, ACTG 3017, ACTG 3018, BUS 3500, and degree checkpoint 2.

ACTG 3038 Accounting Core II - Intermediate Financial Accounting II (4 Credits)
The focus of this course is the foundation and content of published financial statements. Specifically, it covers the following two modules: 1) assets: recognition, measurement and reporting issues, a) fixed assets and b) intangible assets; 2) liabilities: recognition, measurement and reporting issues, a) current liabilities, b) contingencies, and c) long-term liabilities. Common to each of the modules is an emphasis on reading GAAP and applying the GAAP guidance to fact patterns. In particular, the course is designed to enhance each student's ability to identify, discuss, and resolve open-ended problems (i.e., those having no single "correct" answer). Therefore, each student must commit to being an active participant in the class discussions. The two main reasons to participate are that (1) the class will be a richer experience if we hear a variety of views on each issue and (2) it is important to develop confidence in your ability to analyze and discuss complex technical issues, and to explain and justify your conclusions. Prerequisites: ACTG 3016, ACTG 3017, ACTG 3018, BUS 3500, and degree checkpoint 2.

ACTG 3049 Accounting Information Systems (4 Credits)
The objective of this course is to provide an integrated learning opportunity that encompasses financial statement assurance and accounting information systems. The first part of the course exposes these issues using a hypothetical company based on an actual company. The student should develop a knowledge and understanding of this particular industry and how it provides assurance of the company's financial statements as well as address a variety of challenging accounting information systems issues. The second part of the course focuses on a conceptual framework to emphasize the professional and legal responsibility of accountants, auditors, and management for the design, operation, and control of AIS applications. Prerequisites: DCB checkpoint 2, ACTG 3016, ACTG 3018, ACTG 3019.

ACTG 3068 Intermediate Financial Accounting III (4 Credits)
This course is a continuation of ACTG 3018 and ACTG 3038 and completes the examination of the foundation and content of published financial statements. Specific topics include: stockholders’ equity, investments in debt and equity securities, revenue recognition, income taxes, pensions, leases, statement of cash flows, accounting changes and errors, and interim reporting. Cross listed with ACTG 4282. Prerequisites: ACTG 3036, ACTG 3037, ACTG 3038, and degree checkpoint 2.

ACTG 3069 Accounting Communications (4 Credits)
This course emphasizes critical communications skills for future accounting, tax, auditing and consulting professionals. The course develops written communication skills including but not limited to technical writing, reporting the results of research and explaining complex issues. Oral communication assignments include formal presentations, development of debate skills and boardroom presence. Assignments incorporate business etiquette and teambuilding. Prerequisites: ACTG 3036, ACTG 3037, ACTG 3038, and degree checkpoint 2.

ACTG 3220 Understanding Financial Statements (4 Credits)
Provides business majors with the necessary understanding to read, interpret, and use published financial statements. Cross listed with ACTG 4222. Prerequisites: ACTG 2200 and degree checkpoint 1.

ACTG 3230 Financial Statement Analysis (4 Credits)
Consolidated financial statements, accounting for leases, currency translation, and options and futures impacts, GAAP to restate financial statements for differences between companies. Impact of financial transactions and evaluating a firm's performance from a user's perspective. Cross listed with ACTG 4220. Prerequisites: ACTG 3220 and degree checkpoint 2.

ACTG 3284 Consolidated Financial Statement (2 Credits)
Consolidation procedures, issues in the preparation and presentation of consolidated information, and interpretation of consolidated financial statements. Cross-listed with ACTG 4284. Prerequisites: degree checkpoint 2 and ACTG 3282 or ACTG 3068.

ACTG 3285 Accounting for Foreign Operations (2 Credits)
Financial statement impact from doing business in a foreign currency, having foreign subsidiaries or operations, and certain hedging activities. Prerequisites: degree checkpoint 2 and ACTG 3282 or ACTG 3068.

ACTG 3340 Topics and Cases in Managerial Accounting (4 Credits)
Research and presentation (oral and written) of cases in managerial accounting involving internal reporting, internal uses of financial data, and effects on and considerations of interpersonal and interorganizational relationships. Prerequisites: degree checkpoint 2 and ACTG 2300.

ACTG 3360 Profit, Planning & Control (4 Credits)
Comprehensive planning in the corporate environment involving in-depth study of goals, procedures, responsibility, and coordination of planning and control process. Objectives and structuring of planning process, significant problem areas, benchmarks for alternative evaluation processes, and correction and control tools. Prerequisites: degree checkpoint 2 and ACTG 2300.

ACTG 3440 Business and Investment Tax Issues (4 Credits)
Income tax conceptual framework applicable to common business and investment transactions, including tax implications of business decisions. How effective business planning depends on accurate assessment of relevant tax factors. Prerequisites: ACTG 2200 and degree checkpoint 1.

ACTG 3461 Individual Income Tax (4 Credits)
Federal income tax as it applies to individuals, including discussion of rates, exemptions, deductions, and accounting methods; gross income, property transactions, tax deferred exchanges; business operating taxpayer issues. Prerequisites: degree checkpoint 2 and ACTG 2200.
ACTG 3462 Corporate & Partnership Tax (4 Credits)
Federal income tax as applied to the formation, operation and dissolution of business entities. Determination of corporate taxable income, special deductions, credits, methods of computing tax liability and estimated tax requirements. Determination of partnership and S Corporation ordinary income; classification and amount of separately stated items allocable to partners and S Corporation shareholders in accordance with the conduit principle. Prerequisites: degree checkpoint 2 and ACTG 3036 or ACTG 3440.

ACTG 3551 Auditing (4 Credits)
This course covers professional ethics and legal environment, generally accepted auditing standards (GAAS), internal control, audit documentation and auditors reports. Prerequisites: degree checkpoint 2, ACTG 3282 or ACTG 3068 or instructor's permission.

ACTG 3607 Not-For-Profit and Governmental Accounting (4 Credits)
Accounting methods and managerial analysis used for governmental bodies and private and public not-for-profit institutions. Cross listed with ACTG 4607. Prerequisites: degree checkpoint 2 and ACTG 3282 or ACTG 3068.

ACTG 3701 Topics in Accounting (1-4 Credits)

ACTG 3702 Topics in Accounting (1-4 Credits)

ACTG 3703 Topics in Accounting (1-4 Credits)

ACTG 3704 Topics in Accounting (1-4 Credits)

ACTG 3705 Topics in Accounting (4 Credits)
Prerequisite: ACTG 3068 or instructor's permission.

ACTG 3880 Internship - Undergraduate (0-4 Credits)
Practical work experience.

ACTG 3885 Undergraduate Field Experience (0 Credits)
Compensated work experience; no academic credit. Prerequisite: instructor's permission.

ACTG 3991 Independent Study (1-10 Credits)
Independent research/study; requires written report. Prerequisite: instructor's permission.

ACTG 3992 Directed Study (1-10 Credits)

ACTG 3995 Independent Research (1-10 Credits)

Advanced Seminar

All undergraduates at the University of Denver are required to take an Advanced Seminar, an upper-level course capped at 15 students.

While knowledge and professional skills found in a student's major and minor are important foundations for accomplishment, successful individuals also must be able to navigate a complex political, social, cultural and economic environment that challenges more traditionally limited concepts of higher education and competencies. To help students better understand the demands of contemporary life, instructors teach an advanced seminar based in their area of expertise and passion. The topic will be approached from multiple perspectives in a course designed for non-majors. Studying in this setting, students demonstrate their ability to integrate different perspectives and synthesize diverse ideas through intensive writing on that topic. This course must be taken at the University of Denver. Students must complete all other common curriculum requirements before taking the Advanced Seminar.

Advanced Seminar courses meet four criteria in terms of writing.

1. Students will write a minimum of 20 pages (about 6000 words), some of which may be informal, but some of which must be revised, polished and intended for an educated readership.
2. Students will complete a minimum of three writing projects that are distributed over the quarter; exceptions might include a cumulative project completed in multiple stages.
3. Students will be required to revise some of their work based on feedback from their professor.
4. There will be some instructional time given to writing.

Courses

ASEM 2403 Versions of Egypt (4 Credits)
Students examine foreign and native descriptions of Cairo and Egypt, written over the last 200 years. This course is, at a basic level, a means of traveling to another country and culture. The course studies the effects and after-effects of colonialism and the way Europeans and Americans understand themselves in relation to Islam.
ASEM 2410 Science & Religion in Dialogue (4 Credits)
This course examines the relationship between science and religion. Our key question is "What is the best way to understand or construe this relationship?" We begin by attempting to identify and, then, dispel certain popular "myths" about science and religion. Then we turn our attention to the life, the scientific discoveries, the religious commitments and struggles of Charles Darwin. Darwin’s career is the perfect entry point for considering much broader issues in the relationship between science and religion. Darwin’s evolutionary theory fundamentally shaped modern science. But in so doing it also raised significant challenges to traditional religious belief, particularly in Christian communities of faith. For that reason, Darwin is as controversial today as he was 150 years ago, especially in (tho’ not limited to) America. With that foundation, we shall be in a position to wrestle with a quite recent, thorough-going reassessment of the science/religion debate, one that is both critical and constructive. Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2416 France and Germany: From Carnage to Community (4 Credits)
Today, much to the United Kingdom's chagrin, the European Union is dominated by a closely cooperating "dyarchy" of the French Republic and the Federal Republic of Germany. Go back a century, however, or two or three, and you find France—whether republic (1909), empire (1809), or kingdom (1709)—preparing for war with Germany (1909) or catching her breath between campaigns against various German states (1809, 1709). Hundreds of years of European history are marked and marred by increasingly devastating collisions between these two proud nations. When we review and appreciate that bloody "back-story," their present harmony, indeed on many important matters their unison, is an astonishing outcome, which this course attempts to explain, examining implications for the future of Europe, of the Western alliance, and of the world.

ASEM 2421 War and Peace in Japanese Film (4 Credits)
War and Peace in Japanese Film looks at Japanese films of the 20th century as documents of the transformation of Japan from an imperialistic and aggressive state to something quite different. It considers contrasting interpretations of Japanese film, ranging from orientalist stereotyping to postmodern critiques of standard categories. The course examines the work of established directors like Kurosawa and Ozu, but also newer filmmakers and challenges too-narrow cultural preconceptions.

ASEM 2422 Textual Bodies: Discourse and the Corporeal in American Culture (4 Credits)
This course explores how bodies acquire meanings, and how those meanings are created, represented, disseminated, or contested through discursive and embodied means. Course practices include close readings of literary, philosophical and visual texts; creative and auto-ethnographic writing exercises; and in-class dance-based movement drills. Prerequisite: Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2436 Life and Death (4 Credits)
In this course, students examine several of the moral issues concerning the circumstances under which it is appropriate for humans to bring about life or death. For example, is it morally permissible to bring about, and subsequently destroy, human life in a petri dish? Is it permissible to bring about the death of people who have killed others? We examine and evaluate others' responses to such issues. En route to answering these questions, we pay significant attention to the scientific and empirical factors relevant to which moral responses we should have and to the legal factors determining the actual policies we do have.

ASEM 2453 London and Media: Then and Now (4 Credits)
This seminar explores London's "popular" and "high culture" media in the 19th and 20th centuries. Taking advantage of both the University of Denver's online databases and London library holding, students explore a number of the major 19th century London-based British newspapers and journals that proliferated after the abolition of the Stamp Tax in 1855. Students explore significant differences between popular and high culture in 19th century newspapers and journals that target different audiences. Simultaneously, students read articles from contemporary London newspapers. They have a constant commentary on contemporary issues to counterpoint the 19th century readings. From these parallel readings, students discover not only similarities and differences in key issues but also learn how rhetoric, style, diction and voice differ between 19th- and 20th-century journalism. Class discussions and writing assignments focus on comparisons between 19th- and 20th-century topics, intended readership, style and rhetoric.

ASEM 2458 Satire in the Arts & Media (4 Credits)
This course explores how satire, in its myriad manifestations, juggles immediacy and universality in the cultures and time periods in which it is born. The course's interdisciplinary nature makes it unique, and its celebration of satire as a discipline that traverses a multitude of forms gives the course an exciting, dynamic quality.

ASEM 2460 Latina/o Religious Traditions (4 Credits)
This course is organized around the broad question: Is there enough commonality in the texts (including cultural texts) we have studied to organize and name a singular field of social relations we can rightly call "Lainta/o Religion?" This course engages and excites students by enabling them to study religious traditions in an academic place removed from direct faith commitments. Toward this end, we will view art, hear music, watch films and talk to religious leaders.

ASEM 2481 Witchcraft & Renaissance Drama (4 Credits)
Witchcraft and Renaissance Drama traces how the rise of the witchcraft panic in England is reflected in and fueled by several venues of cultural production in England from 1558-1621. The course takes an historical journey through the laws against witchcraft, the witch trial transcripts, the emerging gender pamphlet wars and the popular drama as all manifestations of how the metaphor of witchcraft served to address several cultural fears of the transition between Early Tudor, Late Elizabethan and Early Jacobean to explore how the drama both responded to and shaped the development of the Witch craze.
ASEM 2482 Africa (4 Credits)
In this course, we study the literature, politics and culture of Africa from pre-colonial times to the present. We begin by examining Africa as the locus of the world's oldest civilization and by discussing some key moments in African history. We then focus on the four regions of Africa, on country- or region-based examples of culture and politics in Africa—such as colonial rule in East Africa, war of independence in North Africa, military rule in West Africa, Apartheid in Southern Africa. We also discuss Africa and the world, or Africa in the context of modern-day globalization. In each case, we discuss historical accounts and literary representations as well as political and cultural contexts.

ASEM 2486 Chaucer's London (4 Credits)
This course is a study of the medieval London - the people, customs and social order--by looking through the lens of the great satirist of the fourteenth century, Geoffrey Chaucer. We read a few of the Canterbury Tales and some medieval documents that give a fuller picture of medieval London. Our focus is on seeing the medieval origins of the modern city, and comparing the medieval cosmopolitan city with the cosmopolitan city of the early twenty-first century. In addition to reading original documents and secondary research on medieval London, we take virtual trips to Canterbury, the medieval university towns of Oxford and Cambridge, the medieval cities of York and Norwich, the Museum of London, and learn about the historical significance of the Tower, Westminster Abbey, Guildhall, Inns of Court, and St. Bartholomew-the-Great.

ASEM 2491 Art and the Environment (4 Credits)
This class takes an historic approach to a discussion of art and the environment. While certainly we could go back to the integration of art and its environs in the Prehistoric period, this class focuses on the contemporary art world.

ASEM 2492 Animals and Human Societies (4 Credits)
This course considers human-animal relationships from a variety of disciplinary perspectives. Focusing on Western Europe and America, we explore the many ways in which people interact with non-human species--killing them for pleasure, eating them, observing them and caring for them--and the effects of these interactions on both animals and people. Thinking about animals sheds light on crucial issues in today's society, with implications for everything from environmental change to the impact of consumer culture to the ethics of euthanasia.

ASEM 2494 Global Ecology of America (4 Credits)
Ecology is the science of interconnections, and “The Global Ecology of America” encourages students to think anew about the ways the United States interconnects with the rest of the world. As the word “ecology” suggests, our primary focus is on environmental interconnection. This class is concerned with both communities and environments. It seeks to make students more aware of the essential links between the two, and it also seeks to shed light on the often unseen or ignored ways our lives, as Americans, shape—and are in turn shaped by—the lives of other people in other places all around the planet.

ASEM 2501 The Addictive Self (4 Credits)
This course examines the interconnections between addiction and the formation of the sense of self or “self-identity.” Students construct a working theory of addiction in relationship to selfhood, considering narratives of addiction, and explore the stories not only of alcoholism and drug addiction, but also of food and “process” addictions. The course explores the texts and issues involved from a variety of disciplinary perspectives, including especially those of psychology, sociology, psychoanalysis, literary criticism cultural theory and philosophy.

ASEM 2516 Do the Wicked Prosper? (4 Credits)
This course revolves around a question, which is famously quoted from the Bible, “Why do the wicked prosper?” The quotation presupposes that the wicked do prosper, but many strands of human thought challenge the supposition. This course examines the students’ reactions to this question and leads them to approach the question and their reactions to it from a variety of academic perspectives.

ASEM 2517 Prostitutes of the Pen and Novel: 18th Century Women Novelists (4 Credits)
This course investigates the writings of 18th Century British women authors, focusing on the historical and cultural contexts surrounding their work, which was often stigmatized. It explores how these authors contributed to the development of the novel even as they created a profession for themselves at a time when economic, political, legal and educational policies limited women’s opportunities. Prerequisite: completion of all other Common Curriculum requirements.

ASEM 2518 Exploring Italy (4 Credits)
This class combines a seminar meeting throughout fall quarter with two weeks travel to Italy following exams. Students focus on the art and literature of Rome, Florence and Venice in preparation for their travels. Students concurrently enroll in Excavating Italy (ARTH 2613 or ENGL 2613) as a co-requisite.

ASEM 2527 Life’s Aim (4 Credits)
How do our everyday activities and our short-term goals, like graduating from college and finding a job, fit together with some of our less concrete and more long-term concerns like finding happiness and meaning in our lives? Is there some way to understand our daily activities as coherent with and supportive of these overarching goals? Using philosophical, literary, psychological and economic texts, this course consists of an examination of the conceptual dichotomy of means vs. ends and the role that it plays in our analysis of human activity.

ASEM 2531 Culture of Desire (4 Credits)
Sex—we talk about it all the time. Talk shows, online, in magazines, in plays and music, sex shows up everywhere. Why do we expend so much energy on something that, in most cultures, isn’t really discussed much in public? And what is sex, exactly? How do we define it? How do we legitimize sex, and why have we decided to categorize people as heterosexual, homosexual, bisexual...? What structures have we developed to make us conform to those categories, and what discrepancies have we chosen to ignore? Why is it problematic to base arguments about relationships on historical evidence? In this course, students find out answers to these questions, answers that will lead to even more questions and problems.
ASEM 2532 Death & Dying in Hindu Traditions (4 Credits)
This course explores the meanings of death and dying in Hindu perspectives. The inevitability of death has led cultures throughout the world to speculate on what happens to the individual during, at the moment of, and after death. Until the modern period, religions have typically been the first or only place where people turned for answers to basic questions of existence: What happens at death? Will I and the people I love disappear forever? Or will we continue on after death in some way? Is this the only life we have? What is the relationship between the life we lead now and what happens at and after death? These kinds of universal questions have led to culturally specific and conditioned answers and speculations, some of which we will examine in this course.

ASEM 2555 India and Historical Film (4 Credits)
This is a course that utilizes films, fiction and writings of professional historians to explore themes in Indian society and culture such as the colonizer ‘self’ and the colonized ‘other’, the mechanisms of difference whether based on race, gender or religion, the processes of identity formation through national movements or community ties, real or imagined, and the quest for modernity through economic development and societal reform.

ASEM 2557 Body & Sexuality in Religions (4 Credits)
This course examines the unique place of the body in biblical religion. We ask how the Bible and its interpreters have shaped current views on sex and the gendered body in Western society. How has the Bible been (mis)used in relation to current understandings of the physical body? Is the saying that a “human” does not have a body, but is a body as true for the Hebrew Bible as the Christian New Testament? How has Judaism and Christianity (de)valued sexuality, procreation and celibacy? How do the biblical traditions shape our modern opinions about the ideal physical body and body modification? How can we understand “out-of-body” experiences and notions of death and afterlife in Western religion? Students are encouraged to interpret the Bible and their own beliefs from a uniquely embodied perspective.

ASEM 2562 Modern and Postmodern Music (4 Credits)
Students explore multiple musical styles and genres, primarily from the 20th century to the present, as they develop new cognitive pathways for experiencing all music. The course devotes substantial time to developing a vocabulary of descriptive terms that apply universally to music even outside the modern and postmodern subject matter.

ASEM 2567 Violence, Law, & the State (4 Credits)
This class is built on interrogating arguably the fundamental issue facing every state: how to deal with violence. Through a mix of academic readings, films, documentaries, and reputable media, we will consider a range of issues regarding violence and the state in the modern world. The three organizing themes for the class are understanding the lived problems of violence, the nature and value of freedom in relation to violence and the state, and the question of how law relates to violence and the state.

ASEM 2568 Outsiders in Italian Fiction (4 Credits)
This class addresses the recurring representation of the character as an outsider in the Italian literary and cinematic tradition of the 20th and 21st centuries. Novels, theatrical plays, and films will be supplemented by a collection of secondary sources on psychology and sociology, providing the tools for a correct thematic and methodological approach to storytelling.

ASEM 2576 Art, Thought, Spirituality (4 Credits)
This course examines the close and complex relationship between esthetic expression and private religiosity, or “spirituality.” The course will examine how theories as well as personal accounts of artistic creativity, experience and appreciation can both broaden and deepen our understanding of the inner life that is otherwise communicated in religious terms and how artistic expression can also have a quasi-religious or “spiritual” character. The central objective will be to illumine the way in which the construction of the individual self and the formation of the personal identity are intimately tied to different quests that are artistic and spiritual at once.

ASEM 2577 Cultural Intersections (4 Credits)
In this course, we explore the dynamics of cultural reception or the translational dimension of modern culture, particularly the reception of narratives within particular cultures and beyond. Our main focus is the principles that integrate and divide people along the lines of race, class, ethnicity and culture. Our journey involves studies of cultural contacts, contexts and narratives from Africa and the Caribbean, Asia and the Middle East, Europe and the Americas.

ASEM 2578 Travel Writing Through the Ages: Exploring Italy and the Self (4 Credits)
A panorama of the evolution of the Travel Writing genre shows how different travelers have interacted with foreign environments for centuries and provides students the model to create their own travel journal. The course focuses on travel narratives to, from, and within Italy. The reading list includes Italian and American writers such as Christopher Columbus, Margaret Fuller, Mark Twain, Carlo Levi, Italo Calvino and Umberto Eco. Excursions to different parts of Italy, visits to historical sites and museums and screenings of relevant Italian films complement the class.

ASEM 2579 From Literature to Film (4 Credits)
In this course, we examine the adaptation of literary works into films. We closely study selected modern literary works and the film interpretations of each work. Focusing on the transition from one narrative form to another, the course enhances the critical skill of students as well as their creative ability with respect to cinematic translations. We, therefore, also have mini scriptwriting workshops as a way of imaginatively highlighting the sort of considerations that go into the making of the film script.
A petition to the Chinese government that asks for the protection of the environment.

A petition to the Chinese government that asks for the protection of the environment.

A petition to the Chinese government that asks for the protection of the environment.

A petition to the Chinese government that asks for the protection of the environment.
ASEM 2652 Conspiracy Theories and Contemporary Culture (4 Credits)
What have become called “Conspiracy Theories” (CTs) have been around since some of the earliest human narratives but have only quite recently been studied as a distinctive phenomenon. Underlying this explosion of popular interest in CTs are a number of intriguing philosophical, psychological and socio-political issues that reveal a great deal about how social discourse is pursued, formed, circulated and empowered (or disempowered) in the contemporary world. In this course, we will view this broad phenomenon of CTs from three different perspectives: (1) philosophical, (2) psychological, (3) social and political.

ASEM 2657 Harry Potter and Esotericism (4 Credits)
Today's students have grown up with J. K. Rowling's seven Harry Potter books. This incredible publishing phenomenon has inspired children and adults alike to devour 500-page books within days of publication, at a time when statistics seem to indicate that people are no longer reading. Why would tales of English school children learning a curriculum of magical skills have so captured the imagination of a generation of young people living in a post-modern world? The purpose of this class then is to examine the role of esoteric themes that pervade the Harry Potter books and to investigate the history of those subjects from the Middle Ages to the present, by focusing on the visual traditions they inspired. Areas discussed include the history of magic and witchcraft, classical and Celtic mythology, alchemy, astrology, fantastic beasts, “books of secrets” and their healing potions, the mythic lore of botany, divination and various esoteric paths of enlightenment.

ASEM 2661 The French Revolution (4 Credits)
This course is an interdisciplinary exploration of the French Revolution. Students learn about the many ways in which the Revolutionary decade of 1789 to 1799 marked a significant break with the French past - politically, socially and culturally. Yet these profound changes could not occur without some continuities. Students reflect upon political, sociological and philosophical questions that make the Revolution relevant today: How do democratic values take root in a traditionally monarchial society? Can these values be exported to societies without democratic traditions? Are liberty and equality compatible? How are nations defined? Can people thrive in a strictly secular—or fundamentalist–society? What is the role of violence and war in effecting political and social change?

ASEM 2662 Testimony, Memory and Allegory: the Representations of the Chinese Cultural Revolution (4 Credits)
This course investigates how the Cultural Revolution serves as a critical link of the Revolutionary Era (1919-1980) and Reform Era (from 1980 on), via closely and critically examining various representations and surreal fiction, melodramatic and avant-garde cinema, lyric poems, music and visual arts. Although much of the material discussed is socio-politically oriented, the focus of the course is within the realm of literary and cultural criticism. This course explores complicated and often interwoven relationships between testimony, memory, signs, meanings of both writing and reading about traumatic events of the Cultural Revolution, ethical (personal and communal) commitment to memory and the engrossing historical, literary and artistic representations of the past expressed in different media. By doing so, the course reveals how each representative account copes with its producer's distinctive memories of the Cultural Revolution and, more importantly, responds to the cultural and political contingencies of the producer's time, as well as the artistic conventions of the producer. As such, it functions not only as a connection to the past but also a reconfiguration of the present.

ASEM 2665 Occupied France in Perspective (4 Credits)
This course deals with the Occupation of France during World War II. Students, throughout the course, learn to understand, describe and articulate selected crucial aspects of this four-year period of military occupation. This course examines the question of the image of the Resistance and Occupation in cultural memory; this is a much studied and debated issue today, and forms the conclusion to the course. Forms of collaboration and resistance are very much in question in historical, cultural and literary debates today.

ASEM 2670 Development in Latin America (4 Credits)
This is a writing-intensive course centered on examining in a critical manner the continued efforts made by several countries in Latin America throughout the 20th century in promoting different projects of national economic and political development. Among other topics, we analyze the incorporation of Latin American countries into the international economy and the consolidation of its local oligarchic regimes (circa 1880s to 1930s); the importance of populism and elite pacts (of the 1940s and 1950s) for the promotion of industrial programs; the process of radicalization of the left, the democratic breakdowns and the ensuing military rule (of the mid-1960s and 1970s); the transitions to democratic rule (1980s); the implementation of market-reforms (1990s); and the current challenges for democratic consolidation.

ASEM 2672 The Berlin Republic: Germany since 1990 (4 Credits)
For roughly two decades, Germany, a once divided nation in the heart of Europe held responsible for World Wars, has been re-united. Forty years of division between West- and East-Germany—a division exacerbated by their respective geopolitical roles in the Cold War—left its mark on what many intellectuals considered a 'cultural nation' in spite of their political separation. This class examines the pains and gains of twenty years of unity, a process that has repeatedly been described as an attempt to “normalize” Germany's complicated history. We analyze various political, historical, but mostly cultural developments (and debates) that have accomplished and, at times, questioned this unification.
ASEM 2677 The Sixties: Swinging London (4 Credits)
Most of us are familiar with the main images of the 1960s in Britain, miniskirts, Mods, scooters, hippies, free love, the Beatles, the Rolling Stones, and James Bond. Considered the great decade of change, students' parents and other baby-boomers look back on it with nostalgia and the media continues to romanticize the period as being more innocent than today. Yet scholars continue to argue about the degree to which the Sixties really changed British society. While popular culture was clearly departing from that of the pre and immediately post-war era, many scholars from various disciplines assert that these changes, including the rise of the music industry, the teenager and youth culture, consumer-oriented society, spy literature, gender and racial issues found their roots in the post-war experience. Other scholars assert that the decade was dominated by contradictory impulses and that the major changes were uneven and often on the surface. This course traces the major themes of the period, including the rise of popular youth-based consumer culture, an unfettered media in Fleet Street, the center of world fashion-Carnaby Street, espionage literature on the page and on the screen, race and immigration issues, challenges to gender norms and sexual 'liberation', Britain's changing position in the world, the end of the British Empire, and the redefining of British national identity. These themes are investigated using a variety of sources including popular and documentary films, personal memoirs, novels, primary documents, secondary literature, fashion, poster art and other non-traditional sources.

ASEM 2679 Thinking, Eating, and Writing: Food History (4 Credits)
Nearly everything related to food and drink has a fascinating history: origins of dishes, food habits, customs, traditions, manners and modes of consuming food. This course integrates academic and some popular histories of food with student-created histories based on research, experience, and observation. Students read widely to understand the production of knowledge in food history and its vast scope, from a range of approaches, including theoretical, geographical and topical. Students engage in exercises to strengthen skills as historians and produce original archival research.

ASEM 2680 Jewish Literature of Latin America: Tradition and Innovation (4 Credits)
This course examines Jewish presence in Latin America from colonial times to the present, focusing on Jewish writers in Spanish America throughout the 20th century and considering Jewish-Brazilian and Jewish-Latino writers, Jewish themes in non-Jewish Latin American literature, and the various waves of Jewish immigration to Latin America. This course considers how they helped shape their specific communities and their responses to assimilation, state-sponsored anti-Semitism and Aliyah. Topics to be discussed include assimilation vs. integration; the construction of Jewish and national identities; and anti-Semitism in literature, film and political discourse. The course integrates critical readings alongside the literature, specifically in the areas of trauma and representation. No knowledge of Spanish is required, as the language of instruction is English and all required texts are available in English translation.

ASEM 2683 Bad Girls, Riot Grrrls and Misbehaving Women (4 Credits)
This course introduces women who subvert mainstream expectations of femininity and explore misbehaving as a means of self-definition and empowerment in popular culture. From "Bad Girl" artists and the Riot Grrrl movement in the 1990s, to current day roller derby skaters and burlesque queens, the course traces the intersections of feminist art, DIY (do-it-yourself) approaches, creative production, performative outlets and socio-political consciousness. Unladylike behavior is explored as a strategy to articulate personal, social, political and cultural identity.

ASEM 2685 Religion and Filmmaking (4 Credits)
This course examines film and television representations of religions from around the world in an effort to understand the goals of the media makers and the effects of their productions. The techniques, theory and rhetoric of the films viewed are dissected and discussed. The course enables students to participate in critical, yet respectful debates about the cinematic mediation of religious concepts.

ASEM 2688 Music and Consciousness (4 Credits)
This course explores ways of framing and defining individual and collective responses to musical arts, and, in turn, how understanding these responses can lead to a broader view of human consciousness. Through studying different musical cultures (and subcultures), students critically examine their own musical preferences and respond to other's aesthetic positions. Students explore 20th-century musical writings and compositions; examine themes of development, change, unity and variety in different musical genres; entertain musical manifestos written by various composers and musicians; and write their own "musical constitution.

ASEM 2692 Philosophy of Migration and Global Citizenship (4 Credits)
The 21st century is already being described by many as "The Age of Migration." This course explores the implications of mass global migration for the political philosophies of citizenship on which sovereign states are founded. Is something like a global citizenship possible? This seminar offers a cross-disciplinary perspective on this and other related issues. Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2693 The Unfathomable Russian Soul: Identity and Self-Perception in 19th Century Literature and Culture (4 Credits)
This course explores Russian identity and the idea that it resides in the "unfathomable Russian soul" that defies rational explanation. Students examine how classic Russian authors (Pushkin, Gogol, Turgenev) imagined and shaped "Russian soul" in their dialogues with Western European cultures and Russia's native traditions (folklore, Orthodox Christianity). Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2694 The Golden Age of Musicals (4 Credits)
This course maps and analyzes the developments, constructs, creators and canonical works of the musical theatre genre up to and through its formative, formidable period known as the “Golden Age” (c. 1943-1964) as well as the genre's wider social/cultural implications and contemporary relevance. Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2695 Religion and Politics in China (4 Credits)
This course explores the concept of "religion" in the political history of modern China. Students gain new insight into two concurrent and divergent historical processes—state-driven secularization and religious revival—in China and Taiwan. Completion of all Common Curriculum requirements is required prior to registering for this class.
ASEM 2698 Justice, Legal Obligation and Judicial Decision Making (4 Credits)
This course provides students with an introduction to the major theories of judicial decision-making and the basic philosophical problems involved in understanding the concept of how law binds citizens, especially judges, in a liberal democracy. Completion of all Common Curriculum requirements is required prior to registering for this class.

ASEM 2715 Belonging in America (4 Credits)
Who belongs in America? Who is on the inside/outside, and why? How do we define, experience, maintain, reject, and embrace our own insider/outsider status? Finally, how do American novels and dramas conceptualize and dramatize the many negotiations involved in belonging? This course explores the social, cultural, and experiential aspects of belonging in America. Completion of all common curriculum requirements is required prior to registering for this class.

ASEM 2716 Tango: Border Crossings in Art, Race, Gender, and Politics (4 Credits)
This course is a study of the appeal of Argentine tango and why a dance so closely linked to one culture appeals so intensely to people with such different cultural identities. We consider competing answers from academics in many fields – from gender, film, and rhetorical studies to art, politics, and dance – as well as testimonies of dancers and teachers, in Buenos Aires and from around the world. Completion of all common curriculum requirements is required prior to registering for this class.

ASEM 2720 Nazi Germany: History, Literature, Culture (4 Credits)
This course explores Germany's Nazi era. It focuses on themes like redemption, temptation, national community, conflict and memory while analyzing both texts and visuals from and related to the period. Prerequisite: Completion of all other Common Curriculum Requirements.

ASEM 2723 Contemporary Art in Context (4 Credits)
This course examines key trends that have shaped contemporary art and considers how artists have turned to traditional media such as painting and photography and created new forms of art through performance, social media, and digital technologies to produce aesthetic and physical experiences that reflect on contemporary life. Prerequisite: Completion of all other Common Curriculum Requirements.

ASEM 2729 Seduction and Satire in British Women's Novels of the 18th Century (4 Credits)
This course explores how fiction by 18th century British women relates to larger themes of gender (and genre) construction. What is the gender of the novel in the eighteenth century? Why do these female authors make sustained use of the seduction narrative, and how do they work to combine it with more traditionally “masculine” forms such as satire? Are they conforming to or subverting received notions of femininity with such use?.

ASEM 2730 Queer Lives in Musical Theatre (4 Credits)
Musicals are one of the most popular forms of American theatre, commonly considered family friendly and mainstream. However, since its beginning musical theater has also been strongly connected to queer culture. Through watching and listening to musicals as well as studying queer theory, students identify and analyze depictions of queer life throughout musical theatre history.

ASEM 2734 Music and Spirituality (4 Credits)
At a time when “spiritual” music appears in a wide variety of contexts such as churches, yoga studios, raves, and radio broadcasts, “Music and Spirituality” explores individual and collective perspectives on music and transcendence, and teaches how a deeper understanding of those perspectives can lead to a broader view of meaning in human experience.

Air Force Aerospace Studies

University of Denver students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program through an agreement with the University of Colorado at Boulder. Air Force ROTC programs lead to a commission in the U.S. Air Force upon receipt of the bachelor's degree.

Standard Four-Year Course

This program is offered in three parts: the general military course for lower-division (freshman and sophomore) students; the professional officer course for upper-division students; and Leadership Laboratory (attended by all students). Completion of a four-week summer training program is required prior to entry into the professional officer course.

ROTC Course Credit

DU students may apply up to 18 credits as electives for ROTC classes. In some cases, ROTC credit may be applied to program requirements with the approval of the specific program. Students register for AFROTC courses through regular DU registration, though they are taught on the CU-Boulder campus and follow the CU semester calendar.

Additional Information

For further information, visit www.afrotc.com or the AFROTC Detachment 105 website at afrotc.colorado.edu.
Courses

RTC2 1010 Foundations of the United States Air Force 1 (1.5 Credit)
Introduces students to the U.S. Air Force and the USAF officer profession. Uses instructor lectures, films and videos, and group activities to examine Air Force issues, officership qualities, and military customs and courtesies. Emphasizes the communication skills necessary for an Air Force officer. One 1-hour lecture and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 1020 Foundations of the United States Air Force 2 (1.5 Credit)
A continuation of RTC2 1010. One 1-hour lecture and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 2010 The Evolution of USAF Air and Space Power 1 (1,1.5 Credit)
Studies air power from balloons and dirigibles through the jet age and historically reviews air power employment in military and nonmilitary operations in support of national objectives. Looks at the evolution of air power concepts and doctrine and introduces the development of communicative skills. One 1-hour lecture and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 2020 The Evolution of USAF Air and Space Power 2 (0-1.5 Credits)
A continuation of RTC2 2010. One 1-hour lecture and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 3010 Air Force Leadership Studies 1 (0-4.5 Credits)
Provides an integrated management course emphasizing concepts and skills required by the successful manager and leader. Includes individual motivational and behavioral processes, leadership, communication and group dynamics while providing foundation for the development of the junior officer's professional skills (officership). Emphasizes decision making and use of analytic aids in planning, organizing and controlling in a changing environment. Discusses organizational and personal values (ethics), management of change, organizational power, politics, managerial strategy and tactics within the context of military organization. Uses actual Air Force case studies throughout the course to enhance the learning and communication process. Two 1 1/2-hour seminars plus one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 3020 Air Force Leadership Studies 2 (0-4.5 Credits)
Continuation of RTC2 3010. Emphasizes basic managerial processes while employing group discussions, case studies and role playing as learning devices. Continues to emphasize the development of communicative skills. Two 1 1/2-hour seminars and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 3030 National Security Forces In Contemporary American Society 1 (0-4.5 Credits)
Studies U.S. national security policy which examines the formulation, organization and implementation of national security policy; context of national security; evolution of strategy; management of conflict; and civil-military interaction. Also includes blocks of instruction on the military profession/officership, the military justice system and communicative skills. Provides future Air Force officers with the background of U.S. national security policy so they can effectively function in today's Air Force. Two 1 1/2-hour seminars and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

RTC2 3031 National Security Forces In Contemporary American Society 2 (0-4.5 Credits)
A continuation of RTC2 3030. Includes defense strategy conflict management, formulation/implementation of U.S. defense policy, and organizational factors and case studies in policy making, military law, uniform code of military justice and communication skills. Two 1 1/2-hour seminars and one 2-hour lab per week. Classes meet on CU-Boulder campus on the semester calendar.

Department of Anthropology

Office: Sturm Hall, Room 146
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2406
Email: anthropology@du.edu
Web Site: http://www.du.edu/ahss/schools/anthropology/

Anthropology is the study of the origin, history and nature of people and cultures. It explains the relationships among biology, culture and the environments in which people live. Anthropology addresses modern problems, such as the integration of cultural and ethnic diversity, the conduct of international relations, human rights and the management of environmental and cultural resources.

The faculty members of the Department of Anthropology are experts in analyzing human differences in the context of the material (political and economic) conditions of life. They are concerned with the interaction of gender, race, ethnicity, class and other variables in human affairs, and with the consequences of these relationships for social change and development. Drawing on the resources of the Museum of Anthropology, they are concerned with how the material world expresses and sustains human relationships and ways of thinking.

The department has an archaeology lab, ethnology lab and a museum housing collections of archaeological and ethnographic materials. The department also has computer-catalogued collections, working relationships with Denver-area museums and archaeological field opportunities. Students interested in careers in archaeology, cultural anthropology or museum anthropology can find courses designed to meet their needs.

The department provides the Thomas A. Bogard Scholarship for a senior majoring in anthropology and the Ruth Underhill Anthropology Prize for the best senior paper.
Anthropology

Bachelor of Arts Major Requirements

(183 credits required for the degree (p. 38))

44 credits, including the following:

**Anthropology Foundations**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2000</td>
<td>Pioneers of Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 2010</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 2105</td>
<td>Human Nature</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 2310</td>
<td>Fundamentals of Archaeology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 2600</td>
<td>Museums and Public Culture</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 3800</td>
<td>Capstone Seminar Anthropology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 12 credits in 3000-level courses 12
Select eight elective credits (2000/3000) 8

**Total Credits** 44

Secondary Major

44 credits. Same requirements as for BA degree.

Minor Requirements

20 credits of anthropology.

Courses

**ANTH 1006 Paranormal Archaeology (4 Credits)**

This course explores the virtues and limitations of the scientific method for understanding human society and culture. To accomplish this goal it uses selected mysteries and puzzles from the human past that have intrigued, over many years, professional scientists and the general public alike. The course considers a wide variety of topics having anthropological relevance--Bigfoot, the Big Stone Heads of Easter Island, the Great Pyramids of Egypt, the Great Earthen Burial Mounds of North America, and other phenomena--in an effort to sort out hard facts, pure fantasies, and genuine mysteries. This course examines where the more outrageous explanations of mysterious phenomena come from, and investigates why such explanations are of continuing popularity in modern society. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**ANTH 1010 Anthropology: Humankind in Context (4 Credits)**

This course is a basic one in Anthropology that covers all four major subfields of the discipline including Physical Anthropology (Biological), Archaeology, Linguistics and Cultural Anthropology. It focuses on many aspects of anthropology that have applicability today in understanding our species' place in the world, the development of cultural and biological diversity over time, the growth of complex societies and analyses of contemporary cultures. This class allows us to view ourselves inclusively, taking a broad look at many aspects of our shared humanity on a world-wide basis. This is accomplished by not only studying modern cultures, but also by looking at the history of our species over millions of years. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**ANTH 1910 Ancient Worlds (4 Credits)**

This particular course uses the field of archaeology to illustrate the perspectives, methods and results of humanistic inquiry. It investigates human belief, creativity and spirituality in what we'll call deep history: the 50,000 years or so between the appearance of modern Homo sapiens and the rise of the first great civilizations of the Old and New Worlds. These aspects of life are examined through the study of human material culture, including portable objects, representational art, architecture, monuments and culturally-modified landscapes. A key underlying concept of the course is that material culture forms a unique narrative or "text" about the past history of humankind. This text is unique because everyone who has ever lived has helped to write it. Students learn how to interpret this text, recognize its multiple authors, and distill its larger social and cultural meaning. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**ANTH 1992 Directed Study (1-10 Credits)**

**ANTH 2000 Pioneers of Anthropology (4 Credits)**

Explores the development of anthropology as a field of study, including important thinkers, ideas and relationships between the discipline and its wider intellectual and societal context. Prerequisite: ANTH 1010.

**ANTH 2006 Lost Tribes and Sunken Continents (4 Credits)**

Uses a variety of archaeological mysteries from the human past to explore how we "know" in archaeology, and science generally. Evaluates alternative approaches to making sense of mysterious phenomena, including theories of continental catastrophism, cultural diffusionism, extraterrestrial visitation, and cryptozoology. This course counts toward the Scientific Inquiry: Society and Culture requirement.
ANTH 2010 Cultural Anthropology (4 Credits)
An introduction to the subfield of cultural anthropology, including investigation of varied subfield specializations such as political anthropology, economic anthropology, psychological anthropology, medical anthropology, environmental anthropology and the anthropological study of gender, kinship, religion and globalization. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross-listed with ANTH 4010.

ANTH 2020 Artifacts, Texts, Meaning (4 Credits)
How is it that anthropologists can look at an object in a museum collection and state with confidence what it once was a part of, how it was used, where it came from, how old it is, and even, perhaps, what it meant to the people who made it? What is an anthropological approach to documentation, an important accompaniment to the objects held in museums? In this course, participants learn about the ways anthropologists have approached researching material items and texts (both written and oral), ranging from time-tested techniques to materials science approaches. Each student in the class completes an original research project on an item held in the DU Museum of Anthropology (DUMA) collections. The class involves hands-on work with artifacts, lecture and discussion. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ANTH 2040 Historical Archaeology (4 Credits)
Because it is the archaeology of periods for which there is also written history, historical archaeology is a dynamic and interdisciplinary field. It also has a distinct set of concerns and methods that builds upon, but does not replicate, those of prehistoric archaeology. This course is designed to engage students in the practice of historical archaeology through readings, discussions and the hands-on analysis of archaeological materials. The first class of each week is a discussion of readings in historical archaeology. The readings introduce students to theoretical and methodological issues in the discipline, as well as important case studies. Many of the readings have a North American focus but also address international practice. The second class of each week has a hands-on focus. Backed by readings on historic materials analysis, we discuss and practice the types of research historical archaeologists perform on actual materials, focusing on different material types each week. Students in the course each process and analyze a set of materials excavated from a historic site. Cross-listed with ANTH 4040. Prerequisite: ANTH 2310 or permission of instructor.

ANTH 2060 Human Migration (4 Credits)
This course on transnational migration introduces students to the important theoretical discussions of why and how people migrate and maintain transnational lives. The course examines how migrants change, and in turn bring social, economic and cultural changes to their new destinations as well as to the places that they left behind. Research on transnational migration examines the flows of people, ideas, behaviors, and goods that tie together migrants' communities of origin and destination, and the subsequent creation of new cultures and identities. While the process of transnational migration is not new, the scale of current transnational migration patterns makes today's migration streams different from earlier ones. The lives of migrants today span multiple countries as they maintain social and economic networks across national borders. The ethnographic studies assigned give students an understanding of the changing gender roles and expectations of migrants; the transnational practices migrants carry out to maintain ties to their counties of origin; the maintenance of households in which members are dispersed across borders; and the collective involvement of migrants in the political process and economic development of their countries of origin. This course counts toward the Scientific Inquiry: Society and Culture requirement.

ANTH 2061 Gender, Change, Globalization (4 Credits)
Gender, Change and Globalization introduces students to anthropological approaches to the study of gender and globalization with a focus on social and cultural change. Globalization involves interconnected linkages and flows of commodities, and people and media that are dictated by market demands, facilitated by advanced technologies and regulated by state policies. Difference groups of individuals are located in varying positions within global flows that reflect larger power structures. While globalization brings about uniformity, it also produces differences as people respond to and oppose changes to local cultural practices and economic conditions. The reach of global processes has social and cultural implications for locally established gender ideologies, norms and division of labor. The course presents a survey of cross-cultural variations in gender identities and practices and analyzes how men and women are affected differently by the economic and cultural changes brought about by globalization, such as international development policies, migration and media productions. Contemporary social issues are discussed to explore these transformations and the effects they have on people's everyday lives. This course counts toward the Scientific Inquiry: Society and Culture requirement.

ANTH 2105 Human Nature (4 Credits)
Human biological variation in time and space; investigation of the environmental and cultural impacts on the human organism that have led to the present diversity of the species. A scientific, evolutionary approach to human nature. Required for all anthropology majors.

ANTH 2200 Native North America (4 Credits)
This class focuses on Native North America and is intended to provide an approach to understanding events and processes that have shaped and continue to influence the Indigenous Peoples of Turtle Island. Emphasis is placed on the period following the creation of the United States and Canada and especially on the latter half of the 20th Century, in which Indians mounted increasingly vocal efforts to retake control of their lives and destinies. These efforts will be seen in the light of colonial history, forced acculturation, struggles over resource ownership and management, internal colonialism, and the challenges of Indians' multiple citizenship of the United States and in one or more domestic dependent sovereign nations. Topics include social change; ecological exploitation; Indians in popular culture; gender issues; the power of ritual; struggles for sovereignty and protection of indigenous homelands; identity, assimilation and ethnic conflict.

ANTH 2310 Fundamentals of Archaeology (4 Credits)
This course focuses on the practice of archaeology--why and how archaeologists recover and analyze their data. By the end of this course, students have an understanding not only of the nature of the archaeological record, but also how models of the past are built and interact with general public knowledge.

ANTH 2400 Social Change in Latin America (4 Credits)
Modern Latin America as part of the contemporary Third World, focusing on the social anthropology of peasant and urban peoples, and how economic development and dependency affect them; emphasis on Mexico, Brazil and the Andean nations.
ANTH 2600 Museums and Public Culture (4 Credits)
A critical introduction to how cultures and peoples are presented in museums, festivals, tourism venues and the popular media. The course introduces students to the historical and contemporary role of museums and anthropology in public culture and the importance of both in civic life.

ANTH 2992 Directed Study (1-10 Credits)

ANTH 3000 Anthropology of Tourism (4 Credits)
Considers the interaction of host and visitor cultures in foreign tourism. Explores the effects of tourism on the host culture and the expectations of the visitors. Discusses tourism's relationship to development and the various levels of needs of the tourists.

ANTH 3020 Native Religions (4 Credits)
A cross-cultural survey of concepts used to understand and talk about "religion," "the supernatural," and associated behavior among Native peoples of Turtle Island. Topics include healing and techniques of controlling and channeling supernatural power; sacred places and their significance; myths and symbols in their cultural contexts; initiation rites; conceptualizations of male and female deities; and responses of indigenous people to attempted missionization.

ANTH 3030 Digital Anthropology (4 Credits)
Digital Anthropology introduces students to computer technology used in anthropological research. Students study and then produce a number of digital products useful in the analysis and interpretation of museum collections, for archaeological mapping and research, and for the dissemination of anthropological knowledge online. This process covers the use of Geographic Information Systems (GIS) for spatial analysis, three-dimensional imaging programs ranging in scale from broad landscape mapping to detailed digital artifact analysis. In addition, the use of geophysical methods for imaging what is below the surface allows students to produce images of what lies below the ground in archaeological contexts.

ANTH 3040 Anthropologies of Place (4 Credits)
This class is an exploration of the relationship between people and places from an anthropological viewpoint. We concern ourselves with a variety of ideas about place, emphasizing not just how places are used, but how they infuse themselves into the lives, histories and ethics of those who interact with them. The course readings include book-length anthropological case studies interspersed with interdisciplinary readings about place and landscape. The course includes seminar-style discussions of readings, workshops and observations in the field. On several occasions, we take our class on the road, working together to think about how people and place interact. By the end of the class, each student creates his or her own anthropology of a place. Must be junior standing or above.

ANTH 3060 Cultural Narratives (4 Credits)
Human beings are natural storytellers. Whether reciting oral traditions or recounting personal experience, people everywhere use narratives as a way to express and to understand themselves. This course approaches cultural narratives from two angles. First, it explores the ways that anthropologists, usually trained in the social sciences, make use of and study narratives, whether through ethnographic observation, conducting an interview, gathering folklore or archaeological interpretation. Second, the class investigates narratives that, although produced by non-anthropologists, engage with anthropological issues such as kinship, gender, work, tradition and identity. The narratives range broadly from fiction, to poetry, to film. These two approaches are framed by theoretically informed readings about narrativity, both from the social sciences and the humanities. The class involves intensive reading and writing, as it makes use of both discussion and workshop formats. Each student in the course completes a research and writing project culminating in his or her own cultural narrative. Must be junior standing or above.

ANTH 3070 Folklore and Cultural Heritage (4 Credits)
Folklore and Cultural Heritage is the study of the expressive behaviors and practices that constitute the ordinary, everyday life of communities. Folklore includes the intangible cultural heritages of all peoples, for example, the artistic expression reflected in stories and storytelling, music, dance, legends, oral history, proverbs, jokes, popular beliefs, customs, dialects and ways of speaking. Everyone has folklore and participates in the "folklore process." Prerequisite: introductory social science course. Cross-listed with ANTH 4070.

ANTH 3080 Memory and Memorialization (4 Credits)
The course focuses on how social groups represent, experience and commemorate the remembered past; it explores issues of construction of memory, particularly how representations of the past- and its materialization through monuments, ruins, and landscapes- are connected with issues of institutionalized perceptions of national, ethnic, racial and religious identity. Furthermore, it discusses concepts such as "authenticity," "tradition," and "modernity" in the interpretation of cultural heritage and how the interpretation of the past and of culture depend on context (political and historical), experience and point of view. The course aims to develop an interdisciplinary approach to memory and to methodologies and empirical research.

ANTH 3110 The Cultured Ape (4 Credits)
This course is an examination of human evolutionary psychology. Evolutionary Psychology deals with how contemporary human behavior is constrained by our heritage as evolved primates. It questions the standard social science and mainstream anthropological model of humans as "blank slates" who are primarily shaped by their social and cultural environments. In other words, Evolutionary Psychology views humans as "cultured apes.

ANTH 3130 The Archaeology of Gender (4 Credits)
This course examines the ways archaeology can contribute to the study of gender through investigations of the deep through recent past. The class will include readings on gender theory, the uses of archaeological data and specific case studies of engendered lives in the past. Cross listed with GWST 3130.

ANTH 3135 Feasting, Fasting and Food: The Anthropology of Food (4 Credits)
Feasting, Fasting and Food focuses on foodways and food culture. Food and its acquisition and preparation are tied to the historical, social and cultural lives of all peoples. By drawing on historical sources, ethnography and a number of anthropological perspectives, we look at foodways as symbols of identify, culinary tourism, food work as trade or profession, the study of food as art and theater, and food and memory. Prerequisite: ANTH 2010.
ANTH 3170 Applied Heritage Management (4 Credits)
Considers the role of archaeology in preservation and the management of cultural resources in terms of legislation, ethics and practical application, with emphasis of the utility, necessity and reality of doing archaeology today in the public sector. Site report writing, governmental regulations and the business side of archaeology are stressed. Archaeological information from site reports and artifact analysis are compiled and presented in a digital format. Prerequisite: ANTH 2310.

ANTH 3200 Human Origins and Evolution (4 Credits)
Examines the fossil record for human evolution from 6 million years ago to the origin of modern Homo sapiens, including current theories, evidence and controversies. Considers the historical and sociological contexts of human evolutionary studies, popular myths and misconceptions, and alternative scenarios for the future evolution of the human species.

ANTH 3225 Human Rights in Latin America (4 Credits)
This course aims to provide students with an overview of human rights issues and how they have evolved in recent Latin American history, from the military dictatorships of the authoritarian period to contemporary challenges faced in the region’s democracies. It also aims to place human rights concerns in a broader sociopolitical context. Many of today’s human rights issues are rooted in the past, but others respond to new and emerging challenges. In this class, we will explore the roots and contemporary realities of human rights movements in Latin America. The examination of these topics should allow us to pose broader questions about the meaning of human rights in a globalized world, the efficacy of international instruments for rights enforcement, and the complex challenges that linger in the aftermath of authoritarianism and state-sponsored terror.

ANTH 3255 Ancient North America (4 Credits)
This course examines the history of American Indian cultures from their earliest archaeological traces on this continent up to and including contact with European explorers and colonists.

ANTH 3290 Art and Anthropology (4 Credits)
Study of the concept of art and its multiple roles in society from a cross-cultural and historical perspective. Commodification of culture through tourism and the global art market; arts of resistance and survival; and cultural expression and community development.

ANTH 3310 Indigenous Environment (4 Credits)
The purpose of this course is to introduce students to particular environmental issues that affect indigenous peoples, including subsistence and economic issues; sacred lands; cultural property dilemmas; and the impact that use of traditional cultural properties by others--including nation-state governments, corporations and tourists--have on indigenous peoples' cultural and social integrity. Particular focus is on one of these issues--travel and particularly "ecotravel" and "ecotourism.

ANTH 3320 Medical Anthropology (4 Credits)
This course is an introduction to medical anthropology. As a professional and academic field, medical anthropology provides conceptual and analytical tools for a comprehensive understanding of health, illness and healing. It is concerned with the ways in which individual experience is inserted in social and historical contexts and it explores ideas and behaviors related to health in different societies and social groups, as well as the ways in which different groups organize their resources to face health-related needs in the context of their social and economic realities.

ANTH 3330 Human Rights of Indg Peoples (4 Credits)
This course introduces students to the concept and definition of "indigenous peoples.” It covers the history of resistance, revitalization, and assertion of sovereignty by Indigenous peoples, and why the United Nations felt it necessary to adopt a "Declaration on the Rights of Indigenous Peoples" in 2007. It covers how indigenous identities and indigenous rights issues do or do not "fit" with internationally accepted definitions of human rights. The course will concentrate on the intersection of indigenous autonomy with globalization, neo-liberal ideologies, and nation-state policies. Case studies focus on Iroquois, Crees, Mayans, Mapuche, Zapatistas, Maoris, and Sami.

ANTH 3350 Latin American Archaeology (4 Credits)
Covers the prehistory of the Western Hemisphere south of the Mexico-U.S. border, from initial colonization of the hemisphere by Paleo-Indian people, to the origins of agriculture and the rise of civilization. Olmec, Mayan, Aztec, Chavin, Moche and Inca cultures are covered in detail.

ANTH 3360 Cross-Cultural Perspective: Women (4 Credits)
Confronts question about women's lives and women's status in a global perspective. It addresses issues such as why women have been subordinate to men in so many cultures, how one actually measures dominance and subordination, and whether there is some biological basis for gender inequality. Broad theoretical questions on the status of women are discussed and form the basis for the analytical inquiry which follows. Cross-listed with ANTH 4360.

ANTH 3370 Sex, Class and Race in Latin America (4 Credits)
This course uses an intersectional approach to the study of sex, class and race in Latin America. Intersectionality aims at understanding the interlocking relation between sex, class, race and other aspects, and how these are rooted in historical and social structures, and are reproduced and resisted through individual and collective experience. In this course we will aim at understanding such history, culture and peoples with a special emphasis on examining their heterogeneity, and aiming at understanding how such heterogeneity is also related with social inequality. We will also examine some contemporary issues such as women's rights, indigenous movements, human rights, migrations, and economy with an emphasis on their manifestations at the intersections of sex, class, and race.

ANTH 3380 Women and Development (4 Credits)
A case study approach to understanding women's status and the problems of combining productive and reproductive responsibilities in developing countries. Cross-listed with ANTH 4380, INTS 3390.
ANTH 3390 Geoarchaeology (4 Credits)
Use of geological methods to interpret archaeological sites, ancient landscape reconstruction, study of environmental change and habitation.

ANTH 3430 Visions, Utopias and Messiahs (4 Credits)
Ghost dance, peyote religion, cargo cults, peasant revolution, charismatic leaders, messianic movements in cross-cultural perspectives; roles played by cultural systems, historical circumstances and social conditions in generating social movements.

ANTH 3470 Applied Anthropology (4 Credits)
The practical application of cross-cultural knowledge and awareness to the solution of social and cultural problems. Ethnographic methodologies, a review of the history of applied anthropology and a consideration of the ideological and ethical components of applied anthropology are covered.

ANTH 3485 Anthropology and Underdevelopment (4 Credits)
Anthropological approach to some of the developing world's most pressing social problems and how anthropologists can make a relevant contribution in confronting, studying and changing the nature of underdevelopment.

ANTH 3500 Culture and The City (4 Credits)
Examines the past and future of the city as a human built environment that reflects and reproduces social, political, economic, and cultural forces and ideals. Begins with the origin of cities in antiquity and ends with contemporary urban landscapes. Analysis is sensitive to both the technologies and aesthetics of urban form. Emphasis is on the possibilities for urban redesign to meet the problems of 21st century city life.

ANTH 3510 The Ancient City (4 Credits)
The archaeological study of ancient cities around the world is a booming and controversial area of research. This course investigates what we know about the nature of the earliest cities in the great original cradles of civilization: Mesopotamia, Asia, Africa, and the Americas. Our focus is on how the first cities were planned, built, and experienced by citizens.

ANTH 3540 The Nature of Language (4 Credits)
Language as social, psychological, cultural phenomenon; relationship between cultures, semantics; language as medium of cultural unification; relationship between dialects, social structure.

ANTH 3550 Africa: Peoples and Cultures (4 Credits)
Survey course in the anthropology of Africa designed to explore the diversity of African people and cultures. The course examines issues of contemporary life in the continent as well as the way it has been portrayed by the media, anthropologists, historians, and writers. Topics such as geography, history, society, politics, religion, ethnicities, and material culture of different regions are central to the discussion.

ANTH 35620 Ethnoarchaeology (4 Credits)
Ethnography has often been used as an illustrative device to animate archaeological remains, or to develop models of human behavior, regardless of the geographic and chronological distance between the ethnographic and the archaeological data. This course addresses different perspectives and theories concerning the use of ethnoarchaeology to complement archaeological information. It aims to define the role of ethnoarchaeology in the study of human past, to establish an agenda of issues to which their use is relevant; and to provide a critical overview of major approaches to the use of ethnographic analogies and historical information in archaeology.

ANTH 35630 Archaeological Method and Theory (4 Credits)
This class presents methods for gathering archaeological data in the laboratory and then using a variety of theoretical approaches in its interpretation. Students gather archaeological data using museum collections from a variety of sites. Those artifacts include stone tools and ceramics as well as other environmental data and architectural information in a variety of environmental and landscape contexts. For each site studied students are presented with a body of theoretical literature from which to interpret these data. A variety of interpretative methods can potentially be chosen for each site, and in most cases there is no right answer, only answers that can be supported by the data collected and interpreted using the theoretical constructs read. All students are required to write up complete site reports for each project including all raw data collected in the analysis and theoretical approaches used in interpretation.

ANTH 35650 Dynamics of Culture Change (4 Credits)
Considers culture change and the agents of change. Focuses on changes in indigenous cultures around the world resulting from colonialism 1850-1950, forced acculturation, the tension between worldwide economic development and human rights, and the changing nature of the post-colonial world.

ANTH 35660 Anthropological Theory, Method and Context (4 Credits)
History and development of particular schools of thought, paradigms, methods and methodologies that characterize contemporary anthropology. Intellectual, artistic developments, world-wide sociopolitical and economic processes that shaped much of anthropological thinking of the times. Research methods in reconstruction of human history and qualitative ethnographical research.

ANTH 3610 Museums and their Visitors (4 Credits)
This course is designed to be a comprehensive introduction to museums and their approaches to serving visitors, primarily through exhibitions and education. It examines current research and museum practice as it relates to the museum as an environment for meaningful visitor experiences and learning. The course is organized around the following core issues: (1) What do visitor experiences look like in a museum context? (2) How do museums design for different audience types? (3) What do we learn from assessing visitors' experiences? (4) How do objects, ideas and spaces affect visitor learning and experiences? Cross listed with ARTH 3611.

ANTH 3680 Quantitative Methods-Anthropology (4 Credits)
The use of statistics in all branches of anthropology; data screening; parametric and nonparametric statistics. Prerequisite: any course in basic statistics.
ANTH 3701 Topics in Anthropology (4 Credits)
Specialized topics in anthropology. Check with the Department of Anthropology or the Schedule of Classes for further information; open to students who are non-majors; may be repeated for credit.

ANTH 3702 Topics in Anthropology (4 Credits)
Specialized topics in anthropology. Check with the Department of Anthropology or the Schedule of Classes for further information; open to students who are non-majors; may be repeated for credit.

ANTH 3703 Topics in Anthropology (4 Credits)
Specialized topics in anthropology. Check with the Department of Anthropology or the Schedule of Classes for further information; open to students who are non-majors; may be repeated for credit. Prerequisite: ANTH 1010.

ANTH 3741 Introduction to Conservation (4 Credits)
Introduction to physical properties of materials found in museum artifacts and specimens. Discusses preventative conservation principles and methods.

ANTH 3742 Museum Exhibit Development (4 Credits)
Introduces general principles of planning, development, production and evaluation of museum exhibits. Explores design elements and methods of evaluation. Students have the opportunity to do exhibit mockups and exhibit evaluation.

ANTH 3743 Managing Collections (4 Credits)
Principles and methods regarding acquisition, documentation, conservation and accessibility of collections. Law, registration methods, computerization, policy, development, ethics and preventive conservation are also discussed.

ANTH 3750 Ethnographic Methods (4 Credits)
In this course, students study the art and science of ethnographic research methods, conduct quarter-long field research projects, and write practice ethnographies. The course requires students to apply the American Anthropological Association's Code of Ethics in their research and to write Institutional Review Board applications for their projects. Course readings include texts on ethnographic methods as well as controversial and exemplary ethnographic publications for student dissection and debate.

ANTH 3790 Field Methods in Archaeology (4 Credits)
Introduces basic methods of archaeological survey, excavation, artifact collection strategies and field interpretation. Students learn to create field maps and cross-sectional drawings of archaeological phenomena. Cross-listed with ANTH 1790. Prerequisite: ANTH 2310.

ANTH 3791 Critical Perspectives in Museum Studies (4 Credits)
This course critically explores museums and heritage complexes as sites of cultural production and consumption at different historical moments and in diverse cultural and national settings. Special attention is given to contemporary issues, debates, and approaches in the context of museum anthropology and heritage studies. The term museum is used to include a wide range of heritage projects that do not rely only on the traditional institution established to collect, conserve and exhibit material culture, but includes intangible heritage, historic built environment and event natural environment that was used and marked by human action.

ANTH 3800 Capstone Seminar Anthropology (4 Credits)
This seminar brings anthropology to bear on a topic of special significance. It assesses grasp of the key concepts, theories and insights of anthropology, and critically reflects on the nature and history of the discipline. Prerequisite: Senior standing.

ANTH 3875 Research Methods in Anthropology (4 Credits)
This course offers an in-depth introduction to anthropological research methods with the aim of providing students with the tools necessary to design a coherent research proposal. Starting with the notion that anthropological research is a scientific endeavor, the course offers knowledge and skills that allow for a systematic application of qualitative and quantitative methods to respond to research questions. Students will learn when and how to use one method, as well as the implications of doing it. Students will also learn how to critically read research reports that use qualitative, quantitative, or mixed methods. The course is organized in two portions. The qualitative portion will focus on a detailed exploration of the continuum that goes from posing a research question, choosing a methodology, carrying it on, and reporting the results. The quantitative portion is concentrated on collecting numerical data, methods of which are often based on a qualitative understanding of people. Quantitative analysis will present tools used to take readings, acquire data, observations, and other information necessary to test hypotheses about people, cultures and how we can understand them from their material remains. The purpose of the quantitative part of the class is to determine what is statistically significant and what ideas about people are supportable using the scientific method. This course is required for all anthropology graduate students, and suggested for advanced undergraduates who are working on senior theses, and have an interest in anthropological research. The course is also open to non-anthropology students interested in anthropological research.

ANTH 3880 Culture, Ecology, Adaptation (4 Credits)
This course is organized around these concepts: "ecology," "adaptation," "landscape," "technology," "artifact," and "architecture." The course focuses on defining and examining adaptation and the role of culture and technology in achieving adaptations, or in not achieving them. This focus will be especially pursued with respect to the concept of landscape--that is, culturally defined physical space--and the cultural artifacts that interpret and modify it in the course of human adaptation to its ecological components.

ANTH 3890 Context of Material Culture (4 Credits)
Examines how material culture both reflects and actively structures political, economic and cultural life. Considers the relationship between people and their material culture (portable objects, non-portable objects, buildings, socially-created landscapes) in Western, non-Western, ancient, and contemporary cultural contexts. Reading materials draw from the fields of ethnology, archaeology, folklore, geography, history, art and architecture.
ANTH 3980 Internship (1-8 Credits)
ANTH 3981 Museum Internship (1-6 Credits)
ANTH 3990 Summer Field School-Archaeology (4-6 Credits)
Archaeological excavation, survey and recordings; analysis and conservation of artifacts in the field.
ANTH 3991 Independent Study (1-15 Credits)
ANTH 3992 Directed Study (1-10 Credits)
ANTH 3995 Independent Research (1-10 Credits)

Army Reserve Officers’ Training Corps (AROTC)

University of Denver military science students may participate in the Army Reserve Officers’ Training Corps (AROTC) program through an agreement with the University of Colorado Boulder. Army ROTC programs lead to a commission in the Active Army, National Guard or Army Reserve. Classes may be taken at the University of Colorado Boulder, Colorado School of Mines in Golden or the Metropolitan State University of Denver on the Auraria campus in downtown Denver.

Four-Year Program
The standard four-year program consists of two phases. The basic course, normally completed during the freshman and sophomore years, consists of courses in military science, officer career development, leadership theory and management. The advanced course coincides with the junior and senior years. Subject areas include leadership techniques, methods of instruction, tactics and unit operations, military law, history, national strategy and Army policies. Completion of a four-week advanced camp in the summer is required prior to commissioning, with attendance at this camp normally between the junior and senior years. Students should check with the military science department at the University of Colorado Boulder about the required courses.

Two-Year Program
The abbreviated two-year program consists of the same courses offered in the advanced course; however, both undergraduate and graduate students may become qualified for this program through successful completion of a four-week summer basic camp. Students should contact a professor of military science at the University of Colorado Boulder for specific requirements and options available based on each student’s status at the time of program entry. Students who are veterans of military service or who have participated in Junior ROTC or similar organizations may have a portion or all the basic requirements waived by a professor of military science at the University of Colorado Boulder.

Scholarships
Students enrolled full time may compete for three-year and two-year scholarships. The scholarship also pays a book allowance of $1,200 per year and a monthly tax-free stipend ranging from $300 to $500.

Guaranteed Reserve Forces Duty (GRFD) and Dedicated Army National Guard (ARNG) Scholarships
The GRFD and Dedicated ARNG scholarships are two- and three-year scholarships available for members of the Army Reserve (AR) and Army National Guard (ARNG) who desire to commission in the Reserve Forces. Applicants must join or be members of the AR or ARNG and participate in the Simultaneous Membership Program (SMP) as a cadet. Scholarships are awarded on a competitive basis. Students apply for this scholarship during the spring semester of their freshman or sophomore year. To be eligible, a student must have four to five semesters remaining until graduation. Contact the Army ROTC enrollment officer at 303-492-3549 for more information.

ROTC Course Credit
DU students may apply up to 18 credits as electives for ROTC classes. In some cases, ROTC credit may be applied to program requirements with the approval of the specific program. Students register for AROTCl courses through regular DU registration, though they are taught on other campuses in the Denver metro area and follow the semester calendar.

Additional Information
Interested students may contact the professor of military science, University of Colorado Boulder, 303-492-6495. For further information, visit the Army ROTC web page at www.goarmy.com/rotc/ (http://www.goarmy.com/rotc), or the Army ROTC Golden Buffalo Battalion Web page at www.colorado.edu/AROTC/ (http://www.colorado.edu/AROTC), or email armyrotc@colorado.edu.
Courses

RTC1 1011 Adventures in Leadership 1 (1-3 Credits)
Introduces fundamentals of leadership and the United States Army. Examines its organization, customs and history as well as its current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, team-building concepts, time and stress management, an introduction to cartography and land navigation, marksmanship, briefing, techniques and some basic military tactics.

RTC1 1021 Adventures in Leadership 2 (0-3 Credits)
Continues the investigation of leadership in small organizations. Covers selected topics such as basic troop leading procedures, military first aid and casualty evacuation concepts, creating ethical work climates, an introduction to Army organizations and installations, and a further examination of basic military tactics. Introduces students to effective military writing styles.

RTC1 2031 Methods of Leadership and Management 1 (1-4.5 Credits)
Comprehensively reviews advanced leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior, and leadership self development. Students continue to refine effective written and oral communications skills and to explore topics such as the basic branches of the Army, and officer and NCO duties. Students conduct classroom and practical exercises in small unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization.

RTC1 2041 Methods of Leadership and Management 2 (0-4.5 Credits)
Focuses on leadership and management functions in military and corporate environments. Studies various components of Army leadership doctrine to include the four elements of leadership, leadership principles, risk management and planning theory, the be-know-do framework, and the Army leadership evaluation program. Continue to refine communication skills.

RTC1 3052 Military Operations and Training 1 (0-4.5 Credits)
Further explores the theory of managing and leading small military units with an emphasis on practical applications at the squad and platoon levels. Students examine various leadership styles and techniques as they relate to advanced small unit tactics. Familiarizes students with a variety of topics such as cartography, land navigation, field craft and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Instructor permission required.

RTC1 3062 Military Operations and Training 2 (0-4.5 Credits)
Studies theoretical and practical applications of small unit leadership principles. Focuses on managing personnel and resources, the military decision making process, the operations order, and oral communications. Exposes the student to tactical unit leadership in a variety of environments with a focus on preparation for the summer advance camp experience. Instructor permission required.

RTC1 3072 Officer Leadership and Development 1 (0-4.5 Credits)
Examines management and leadership concepts and techniques associated with planning and executing military training and operations at company and higher echelons. Includes analysis of professional ethics and values, effective training principles and procedures, subordinate counseling, and effective staff officer briefing techniques. Also investigates other subjects such as counter terrorism, modern peacekeeping missions, and the impact of the information revolution on the art of land warfare. Conducted both in and out of classroom setting and with multiple practical leadership opportunities to organize cadet training and activities. Instructor permission required.

RTC1 3082 Officer Leadership and Development 2 (0-4.5 Credits)
Continues RTC1 3072 study of management and leadership concepts and techniques, providing practical leadership experiences in the classroom and during multiple cadet-run activities. Also examines varied topics such as theory and practice of the military justice system, law of war, military-media relations, support mechanisms for soldiers and their families, operational security considerations and historical case studies in military leadership in the context of 21st-century land warfare. Instructor permission required.

School of Art and Art History

Office: Shwayder Art Building, Room 132
Mail Code: 2121 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2846
Email: saah-interest@du.edu
Web Site: http://www.du.edu/art

The School of Art and Art History (SAAH) teaches the technical processes of art, methods of analyzing and criticizing visual culture and the diverse histories of art. We educate students to think critically and conceptually, to express themselves creatively, to articulate their ideas clearly and to make significant contributions to the society in which they live. Our faculty promote these qualities through their creative activity, scholarship and public service.

The School of Art and Art History grants the following degrees:

- Bachelor of arts (BA) and bachelor of fine arts (BFA) degrees in studio art. Both studio degrees include exposure to ceramics, drawing, painting, photography, printmaking and sculpture.
- Bachelor of fine arts degree in pre-art conservation
- Bachelor of arts and master of arts (MA) degrees in art history (with an option of a museum studies concentration at the graduate level).
There are two 4+1 options to allow motivated students to complete both an undergraduate and graduate degree in five years. In art history, a BA and MA in art history/museum studies is available. In studio, a BA or a BFA in studio art/MA in curriculum and instruction with certification to teach K–12 art is offered in partnership with the Morgridge College of Education.

Students seeking to transfer to the University of Denver with admission to SAAH are encouraged to contact the School with questions about degree programs and transfer credit options prior to applying. If admitted to the University and SAAH, all students enter as a BA in either art history or studio, depending on their interest. Students interested in pursuing a BFA in studio art or pre-art conservation apply under the guidance of a faculty member once enrolled in SAAH. Upon admission to SAAH for the fall quarter, students will be provided with instructions about how to submit a portfolio for merit-based scholarship consideration. Flexible options to minor in SAAH are also available.

**Art**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree (p. 38))

60 credits of art, including the following:

| Art Foundations (must be completed before proceeding to upper-level studio courses) |
| ARTS 1100 | 2-D Approaches |
| ARTS 1200 | 3-D Approaches |
| ARTS 1250 | Drawing |
| ARTS 1300 | Concepts |

| Art History |
| 12 credits in art history, as follows: |
| ARTH 2801 | World Art I: Prehistory to c. 1000 |
| or ARTH 2802 | World Art II: c.1000-1700 |
| or ARTH 2803 | World Art III: 1700 to the Present |

A modern or contemporary art history course

An upper-division art history course ¹

| Art electives |
| 32 credits of studio art courses |

**Total Credits**

60

BA students may combine majors or minors within the School of Art and Art History, but no reduction in total credits will be allowed.

¹ May be fulfilled with another world art course.

**Secondary Major**

60 credits. Same requirements as for BA degree.

**Minor Requirements**

24 credits, including at least one upper-division course.

BA students may combine majors or minors within the School of Art and Art History, but no reduction in total credits will be allowed.

**Art History**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree (p. 38))

60 credits, including the following:

| Art History |
| 48 credits in art history, as follows: |
| ARTH 2801 World Art I, ARTH 2802 World Art II, ARTH 2803 World Art III, a Pre-17th Century art history course and 32 more credits in art history. |

| Studio Art |
Select 12 credits of studio art

Total Credits 12

BA students may combine majors or minors within the School of Art and Art History, but no reduction in total credits will be allowed.

Secondary Major

60 credits. Same requirements as for BA degree.

Minor Requirements

The art history minor requires a minimum of 24 credits including ARTH 2801 World Art I: Prehistory to c. 1000, ARTH 2802 World Art II: c.1000-1700 and ARTH 2803 World Art III: 1700 to the Present. One of the 1000-level Common Curriculum classes can be applied to either the major or minor.

BA students may combine majors or minors within the School of Art and Art History, but no reduction in total credits will be allowed.

Pre-Art Conservation

Admission to the BFA program is by portfolio review. Contact the School of Art and Art History (p. 78) for details.

Bachelor of Fine Arts Major Requirements

(189-192 credits required for the degree (p. 38))

Minimum of 116 credits of art. In addition to major coursework, 24 credits of chemistry, including the organic chemistry sequence (CHEM 2451, CHEM 2461, CHEM 2452, CHEM 2462, CHEM 2453, CHEM 2463) and 24 credits of language are required.

Art coursework includes the following:

**Art Foundations (must be completed before proceeding to upper-level studio courses)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1100</td>
<td>2-D Approaches</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1200</td>
<td>3-D Approaches</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1250</td>
<td>Drawing</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1300</td>
<td>Concepts</td>
<td>4</td>
</tr>
</tbody>
</table>

**Studio Art**

44 credits including the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 2045</td>
<td>Intermediate Drawing (or ARTS 3065)</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 2115</td>
<td>Introduction to Oil Painting</td>
<td></td>
</tr>
<tr>
<td>ARTS 2215</td>
<td>Relief Printmaking (or another 2000 level Printmaking course)</td>
<td></td>
</tr>
<tr>
<td>ARTS 2415</td>
<td>Introduction to Photography</td>
<td></td>
</tr>
<tr>
<td>ARTS 2515</td>
<td>Introduction to Ceramics</td>
<td></td>
</tr>
<tr>
<td>ARTS 2615</td>
<td>Sculpture I</td>
<td></td>
</tr>
</tbody>
</table>

**Art History**

44 credits including the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 2801</td>
<td>World Art I: Prehistory to c. 1000</td>
<td></td>
</tr>
<tr>
<td>ARTH 2802</td>
<td>World Art II: c.1000-1700</td>
<td></td>
</tr>
<tr>
<td>ARTH 2803</td>
<td>World Art III: 1700 to the Present</td>
<td></td>
</tr>
</tbody>
</table>

**Pre-Art Conservation Studies**

12 credits of pre-art conservation studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 3872</td>
<td>Introduction to Conservation</td>
<td></td>
</tr>
<tr>
<td>ARTH 3865</td>
<td>Senior Project: Conservation</td>
<td></td>
</tr>
<tr>
<td>ARTS 3915</td>
<td>Advanced Problems in Art (junior or senior standing)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 116

Students complete a senior project working with a conservator. For complete requirements, contact the School of Art and Art History.
Studio Art

Admission to the BFA program is by portfolio review. Contact the School of Art and Art History (p. 78) for details.

Bachelor of Fine Arts Major Requirements

(189-192 credits required for the degree (p. 38))

110 to 135 credits of art, including the following:

### Art Foundations (must be completed before proceeding to upper-level studio courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1100</td>
<td>2-D Approaches</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1200</td>
<td>3-D Approaches</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1250</td>
<td>Drawing</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 1300</td>
<td>Concepts</td>
<td>4</td>
</tr>
<tr>
<td>ARTS 2000</td>
<td>Open Media Studio</td>
<td>4</td>
</tr>
</tbody>
</table>

### Art History

20 credits in art history:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 2801</td>
<td>World Art I: Prehistory to c. 1000</td>
</tr>
<tr>
<td>ARTH 2802</td>
<td>World Art II: c.1000-1700</td>
</tr>
<tr>
<td>ARTH 2803</td>
<td>World Art III: 1700 to the Present</td>
</tr>
<tr>
<td>ARTH 3834</td>
<td>Contemporary Art (or another Modern/Contemporary ARTH course)</td>
</tr>
<tr>
<td>ARTH 3701</td>
<td>Topics in Art History (or any other ARTH course)</td>
</tr>
</tbody>
</table>

### Studio Art

Minimum 70 credits in studio art including the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 2045</td>
<td>Intermediate Drawing (or ARTS 3065)</td>
</tr>
<tr>
<td>ARTS 2115</td>
<td>Introduction to Oil Painting</td>
</tr>
<tr>
<td>ARTS 2215</td>
<td>Relief Printmaking (or another 2000-level printmaking course)</td>
</tr>
<tr>
<td>ARTS 2415</td>
<td>Introduction to Photography</td>
</tr>
<tr>
<td>ARTS 2515</td>
<td>Introduction to Ceramics</td>
</tr>
<tr>
<td>ARTS 2615</td>
<td>Sculpture I</td>
</tr>
<tr>
<td>ARTS 3347</td>
<td>Professional Practice</td>
</tr>
<tr>
<td>ARTS 3348</td>
<td>Senior Practicum in the Visual Arts</td>
</tr>
<tr>
<td>ARTS 3349</td>
<td>Senior Seminar in the Visual Arts</td>
</tr>
<tr>
<td>ARTS 3999</td>
<td>Exit Survey</td>
</tr>
</tbody>
</table>

### Total Credits

110

### Art - Studio Courses

**ARTS 1015 Experiences in the Visual Arts (4 Credits)**

This course explores the language of the visual arts and how it can be used to communicate ideas about culture, history and the personal. Through hands-on exercises and experimentation in different media students create visual art works that interpret the world around them. This course focuses on different areas of the visual arts that change its focus depending on the area of expertise of the faculty teaching it. (Example: drawing, painting, printmaking, photography, ceramics, sculpture.) There are weekly and bi-weekly projects and assignments, demonstrations, class discussions and critiques, writing assignments, guest artist lectures and visits to area museums or galleries. Students leave the course with a broader understanding of the visual arts, past and present, and the ability to take other upper division courses in art or art history. Students also leave with a more in-depth understanding of the creative process that will inform other areas of studies throughout the University and which will enrich their lives long into the future.

Lab fee. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**ARTS 1100 2-D Approaches (4 Credits)**

Students are introduced to the elements of design, vocabulary of art and visual analysis. Explorations of the formal language of two-dimensional media include color, digital processes and mark making. Students also develop an understanding of compositional strategies, materials and processes. Verbal and written exercises supplement group activities and visual learning. Students explore across material boundaries. Increasing emphasis is placed on subjectivity, content and conceptual development. Lab fee. No prerequisites.
ARTS 1200 3-D Approaches (4 Credits)
Students are introduced to spatial thinking, the fundamentals of structural composition and the formal language of 3-D media. Explorations include additive and subtractive methods, basic mold making, and an introduction to hand and power tools. Digital methods and color relationships are also explored. Verbal and written exercises supplement group activities and visual learning. Students work across material boundaries. Increasing emphasis is placed on subjectivity, content and conceptual development. Lab fee. No prerequisites.

ARTS 1250 Drawing (4 Credits)
Fundamental drawing practice and history based on selected exercises, slide presentations, comprehensive group/individual critiques and workshops. Still-life and figure drawing are covered in this course. Projects focus on ways to comprehend and draw three-dimensional forms, with emphasis on conceptual issues and use of materials. This class is required of all majors in studio art prior to taking upper-level courses. It is also required of all EDP students. Recommended prerequisites: ARTS 1100 and ARTS 1200.

ARTS 1300 Concepts (4 Credits)
Students integrate the skills and principles acquired from ARTS 1100 and ARTS 1200. Two topics are explored: ‘Culture & Context’ and ‘Time, Space & Duration’. A greater complexity of studio activity is stressed through collaborative exercises and individual approaches to themes. Greater exploration of context and concept is expected, with emphasis on visual communication and personal awareness. Lab fee. Prerequisite: ARTS 1100 and ARTS 1200.

ARTS 1992 Directed Study (1-10 Credits)
ARTS 2000 Open Media Studio (4 Credits)
This course is a topic driven, interdisciplinary research studio. Students investigate the topic and their relationship to it in a variety of media, and supplement their inquiry with research that occurs outside the classroom. An exploration of different processes, materials, expression and connection with the larger world is emphasized. Lab fee. Majors must complete ARTS 1250 and ARTS 1300 first.

ARTS 2001 Interdisciplinary Approaches (4 Credits)
This course is designed for studio art, art history and majors across the University who want to investigate the potential of creative expression through the fields of art (studio) combined with another discipline (of the student’s choosing). This cross-fertilization creates the potential for ideas to be discovered and presented in new ways. Lab fee.

ARTS 2045 Intermediate Drawing (4 Credits)
This course covers a wide range of materials and ideas, both traditional and experimental. Emphasis is divided between technical and conceptual issues, building on the skills established in ARTS 1250 Drawing. Lab fee. Prerequisite: ARTS 1250 or permission of instructor.

ARTS 2055 Color (4 Credits)
Color is a studio-based course focused on developing a more sophisticated and practical understanding of how colors act on us and vice versa, physiologically, psychologically, emotionally and culturally. It is designed specifically to enhance the abilities of people who work with color, be they painters, web designers, video artists, art historians, art therapists or conservators. However, because of the intentionally basic level of art skills involved, this is a course that is also taken by non-art majors with success. It includes in-class color work that retrains students in their ability to "see" more color and to become confident in their ability to interpret and manipulate color for any specific need. In addition, there is required reading on the physics of color, and discussion of the historical influences and legacy of color in primarily Western culture. Lab fee. Majors should complete ARTS 1250 and ARTS 1300 first.

ARTS 2115 Introduction to Oil Painting (4 Credits)
Introduction to Oil Painting builds on the ideas and skills learned in Drawing. Working with oil paint, students explore the possibilities of creating the illusion of three-dimensional form and space on the flat surface of a canvas. Emphasis is on really looking to heighten one's visual awareness of the physical world and seeing the effects light has on form, color and space. Students work from objects, the human form (models), imagination and art history. Critical abilities will be developed as students learn to think, speak and write about art. Discussions and critiques explore the social, political and the expressive possibilities of art-making. Students are given individual work-space to focus and develop their paintings. Students complete paintings in and out of class; contemporary and historical artists' work is explored, and students visit an area museum or gallery. Lab fee.

ARTS 2125 Exploring Paint Materials: New Forms and Ancient Materials in Painting (4 Credits)
After painting from life and creating the illusion of reality in Intro to Oil Painting, students break away and experiment in this course with new forms of image-making using both modern and ancient paint materials. By learning how to make the ancient paint media of egg tempera and encaustic, students learn that the old can be made new again. In the beginning students examine new ways of generating abstract imagery and gradually return to recognizable imagery at the end. Students discover that the choice of materials and forms influences the way an idea is communicated. Reliance on chance and learning to trust one's instincts will be encouraged. Students get inspiration from a range of sources such as the natural environment, dreams and current cultural issues. Students also begin to discover where their work fits into the ever changing world of contemporary art through written and oral presentations, discussion, critiques and visits to area museums and galleries. Lab fee. Prerequisite: ARTS 2115 or permission of instructor.

ARTS 2215 Relief Printmaking (4 Credits)
Concentration on selected areas of relief printmaking and related contemporary attitudes. This course covers relief, ranging from linoleum and woodcut processes to experimental approaches. Group and individual critiques. Digital image presentations. Examination of actual prints. Lab fee. Prerequisite: ARTS 1250 or permission of instructor. Art majors must also complete ARTS 1300 first.
ARTS 2225 Intaglio Printmaking (4 Credits)
Concentration on selected areas of Intaglio printmaking. Emphasis is placed on conceptual and technical development, and on personal expression through this medium. Group and individual critiques. Digital image presentations. Examination of actual prints. Lab fee. Prerequisite: ARTS 1250 or permission of instructor. Art majors must also complete ARTS 1300 first.

ARTS 2235 Screen Printing (4 Credits)
This course focuses on water-based screen printing and its applications in a workshop/studio intensive atmosphere. Group and individual critiques. Digital image presentations. Examination of actual prints. Lab fee. Prerequisite: ARTS 1250 or permission of instructor. Art majors must also complete ARTS 1300 first.

ARTS 2415 Introduction to Photography (4 Credits)
This course approaches the medium of photography as a fine art. Fundamental techniques in traditional black and white photography, as well as digital photographic image making, are covered. Topics include camera operation, exposure, film developing, film and print scanning, and traditional and digital printing. Projects are viewed and discussed in group critique sessions. Students must have a camera with manual metering capabilities. Lab fee. Art majors must complete ARTS 1250 and ARTS 1300 first.

ARTS 2425 Personal Histories of Photography (4 Credits)
This course is a practical, studio-based introduction to the history of photography. The focus of the course is to trace the evolution of photography as a personal expressive medium. Students are required to complete photography assignments and must have a camera, film or digital. Lab fee. Prerequisite: ARTS 2415 or permission of instructor (this requires demonstrating your proficiency in photography via a portfolio or website).

ARTS 2435 Color Photography (4 Credits)
This course continues to build upon the concepts and techniques investigated in ARTS 2415 Introduction to Photography. Intermediate issues and processes will be studied through photographing in color. Traditional color printing, digital scanning and printing, and color theory are covered. Projects are viewed and discussed as group critique sessions. Students must have a film or digital camera with manual metering capabilities. Lab fee. Prerequisite: ARTS 2415 or permission of instructor (this requires demonstrating your proficiency in photography via a portfolio or website).

ARTS 2440 Alternative Photographic Techniques (4 Credits)
This course continues to build upon the concepts and techniques investigated in ARTS 2415 Introduction to Photography. In traditional and/or digital darkrooms, a variety of alternative photographic techniques may be introduced, such as cyanotype, Vandyke brown printing, Polaroid emulsion transfer, liquid light emulsion, medium- and large-format cameras, digital negatives, pinhole camera, plastic camera, etc. Projects are viewed and discussed in group critique sessions. Students must have a film or digital camera with manual metering capabilities. Lab fee. Prerequisite: ARTS 2415 or permission of instructor (this requires demonstrating your proficiency in photography via a portfolio or website).

ARTS 2445 Digital Photography and Experimentation (4 Credits)
This course continues to build upon the concepts and techniques investigated in ARTS 2415 Introduction to Photography. Students gain an understanding of digital photography and the use of Adobe Photoshop in the process of making art. Through labs and classroom demonstrations this course is designed to improve student’s skill level as an artist/photographer, both technically and conceptually. Projects are viewed and discussed in critique sessions. Students must have a digital camera with manual metering capabilities. Lab fee. Prerequisite: ARTS 2415 or permission of instructor (this requires demonstrating your proficiency in photography via a portfolio or website).

ARTS 2515 Introduction to Ceramics (4 Credits)
This course investigates the unique, material nature of clay as a medium for exploring artistic concepts and ideas. Studio assignments and demonstrations introduce several basic handbuilding methods as well as glazing and firing techniques. This course provides the fundamentals upon which students build their own direction and invention. Emphasis is on experimentation and individuality. Lab fee. Majors must complete ARTS 1250 and ARTS 1300 first.

ARTS 2535 Ceramics: Food and Function (4 Credits)
Gastronomy is the study of the relationship between culture and food. In this class, we explore gastronomic objects associated with food, both functional and sculptural. The importance of food is intimately involved with our concepts and design choices. Studio assignments and demonstrations serve as springboards for the student’s own research and interpretations. Students use many different technical approaches such as throwing, handbuilding, casting as well as mixed media. Ultimately, students investigate, create and EAT! Lab fee. Prerequisite: ARTS 2515 or permission of instructor.

ARTS 2545 Ceramics: The Figure (4 Credits)
This course explores the human body as a means for artistic expression. A variety of styles and techniques are employed, such as realism, abstraction, fragment, narrative, mold making, and handbuilding. No previous figurative experience necessary! We work from images, models and, of course, ourselves. Lab fee. Prerequisite: ARTS 2515 or permission of instructor.

ARTS 2555 Ceramics: Multiples (4 Credits)
This course investigates the many aspects of working with repetition and multiples. Assignments fall under the headings of Repetition, The Series, The Unit and The Collection. Students learn mold making and slipcasting techniques in addition to handbuilding and glazing. Students develop ideas on a conceptual level first and then move into building their pieces, combining the appropriate construction methods to realize their ideas. Lab fee. Prerequisite: ARTS 2515 or permission of instructor.
ARTS 2565 Ceramics: Surface (4 Credits)
This course explores the ceramic surface as a canvas for decoration and narrative in both functional and sculptural forms. Students do extensive exploration and experimentation combining traditional ceramics techniques with those of drawing and printmaking. Students develop ideas on a conceptual level first and then move into creating their pieces, combining the appropriate methods to realize their ideas. Lab fee. Prerequisite: ARTS 2515 or permission of instructor.

ARTS 2615 Sculpture I (4 Credits)
This class creates a supportive but critical context within which students can develop a working vocabulary of conceptual and material ideas in sculpture. All projects explore and demonstrate the inter-relationship of ideas, form, material and technical means. Lab fee. Majors should complete ARTS 1250 and ARTS 1300 first.

ARTS 2625 Sculpture II (4 Credits)
This course is oriented toward students who have some experience in working with sculptural concepts and have some exposure to different materials and methods. Experimentation, investigation and self-examination are looked at in relation to the expanded field of sculpture. Prerequisite: ARTS 2615 or permission of instructor.

ARTS 2701 Topics in Studio Art (4 Credits)
Selected topics in studio art research. May be repeated to a maximum of 12 credits.

ARTS 2992 Directed Study (1-10 Credits)
This class should only be used when a required ARTS 2000-level course listed in this catalog is not offered in the quarter in which the student must take it. Permission of an instructor and the Director of the School of Art and Art History are required. Permission/registration form is available from the Office of the Registrar.

ARTS 3055 Advanced Drawing (4 Credits)
Working with a variety of materials and techniques, students hone their drawing skill and at the same time create finished drawings defined by content. Problems posed encourage independent thinking, experimentation and the development of a personal technical base. Lab Fee. Prerequisite: ARTS 2045 or ARTS 3065 or permission of instructor.

ARTS 3065 Life Drawing (4 Credits)
An intensive course in drawing the human figure, clothed and unclothed, to explore the human form in terms of proportion, movement, light and shadow, composition, color and personal expression. Students experiment with a range of materials. Lab Fee. Prerequisite: ARTS 1250 or permission of instructor.

ARTS 3125 Figure Painting (4 Credits)
An intensive course in painting the human body—the most timeless subject of art. Students work mainly in oils and experiment with a variety of surfaces and techniques. Students also investigate line, proportion, light and shadow, composition and color. Final project: life-size painting of two figures. Lab fee. Prerequisite: ARTS 2115 or ARTS 3065 or permission of instructor.

ARTS 3145 Painting Workshop (4 Credits)
Concentration on selected techniques and approaches to painting. Topics change. Course may be repeated to a maximum of 12 credits. Lab Fee.

ARTS 3245 Printmaking Workshop (4 Credits)
This upper-level course focuses on various topics and processes as the definition of contemporary printmaking evolves. Subjects such as lithography or intermediate screen printing, photo-based prints, or current themes relevant to printmaking are possible core formats for the course. Group and individual critiques, digital image presentations and examination of prints and reproductions. Lab fee. Prerequisites: sophomore standing and ARTS 1250 or permission of instructor. Art majors must also complete ARTS 1300 first. Course may be repeated to a maximum of 12 credits.

ARTS 3347 Professional Practice (4 Credits)
A course is reinforced by field trips and guest speakers who introduce both academic and non-academic art experiences and professions. Lab Fee.

ARTS 3348 Senior Practicum in the Visual Arts (4 Credits)
Required for all studio BFA candidates. Students are expected to begin research and investigation for work that may be included in the BFA exhibitions. Emphasis is placed on a three-pronged assessment consisting of Idea/Concept/Voice, Theory/History/Research and Craft/Technique. Lab fee.

ARTS 3349 Senior Seminar in the Visual Arts (4 Credits)
Required for all studio BFA candidates. Students pursue work individually and demonstrate a synthesis of ongoing research, demonstrate development and participate in structured weekly critiques with other studio BFAs and faculty. This work is a meaningful extension of fall and winter quarters and extends beyond the installation of BFA exhibition. Emphasis is placed on discussions and critiques centered on the three-pronged assessment initiated in winter quarter of Idea/Concept/Voice, Theory/History/Research and Craft/Technique. Lab fee.

ARTS 3445 Photography Portfolio (4 Credits)
From the photographic assignment work produced in this class, students are required to construct a portfolio. The completed portfolio may take the form of matted prints in a box, a book of photographs and/or a website. Students may also be required to participate in a group exhibition during this class. Projects are viewed and discussed in critique sessions. Students must have a film or digital camera. Lab fee. Prerequisite: ARTS 2415.
ARTS 3450 Portrait Photography (4 Credits)
This course continues to build upon the concepts and techniques investigated in ARTS 2415 Introduction to Photography. The class focuses on the genre of photographic portraiture. Through labs and classroom lectures, many interpretations of portraiture are covered. Projects are viewed and discussed in critique sessions. Students must have a film or digital camera with manual metering capabilities. Lab fee. Prerequisites: ARTS 2415 and any one of the following: ARTS 2425, ARTS 2435, ARTS 2440, ARTS 2445, or permission of the instructor (requires demonstrating proficiency in photography via a portfolio or website).

ARTS 3455 Photography Workshop: Alternative Processes in Photography (4 Credits)
Concentration on selected techniques and approaches to photography. Topics change. Projects are viewed and discussed in critique sessions. Students must have a film or digital camera. Course may be repeated to a maximum of 12 credits. Lab fee. Prerequisites: ARTS 2415 Introduction to Photography or permission of the instructor (requires demonstrating proficiency in photography via a portfolio or website).

ARTS 3555 Ceramic Workshop (4 Credits)
Concentration on selected techniques and experimental approaches to ceramics. Topics change. Course may be repeated to a maximum of 12 credits. Lab fee. Prerequisite: ARTS 2515 or approval of instructor.

ARTS 3635 Advanced Sculpture (4 Credits)
Students work at an individual pace in production of sculptural ideas and objects. Lab fee. Prerequisite: ARTS 2625.

ARTS 3655 Sculpture Workshop (4 Credits)
Concentration on selected techniques and experimental approaches to sculpture. Topics change. Course may be repeated to a maximum of 12 credits. Lab fee.

ARTS 3701 Photography, Light and Adobe Lightroom, Santa Fe, New Mexico (4 Credits)
Selected topics in advanced studio art research. Course may be repeated to a maximum of 12 credits. Lab fee. Prerequisite: instructor's permission.

ARTS 3865 Senior Project: Conservation (4 Credits)
Required for, and limited to, BFA pre-art conservation majors. It is normally taken spring quarter of the senior year. The student works with a professional art conservator on a major conservation project that will become part of his or her portfolio and will be exhibited in the senior BFA exhibition.

ARTS 3915 Advanced Problems in Art (1-5 Credits)
This course is for students who have completed all 3000-level courses in a given area of concentration to show proficiency and wish to pursue more advanced work. A proposal form must be obtained from the art office and signed by the instructor and the Director of the School of Art and Art History before the student registers for this course. Variable credit. May be repeated to a maximum of 12 credits. Lab fee.

ARTS 3960 Conservation Internship (4 Credits)
The internship is normally taken during the fall of a major's senior year, under the direction of a professional Conservator, either in private practice or in a conservation department. Students should work closely with their advisor to arrange the Conservation Internship during the quarter before it will be taken. The student works on a wide variety of materials and problems in conservation during this internship, gaining as varied an experience as possible and developing a professional portfolio. Must be a BFA major in Pre-Art Conservation.

ARTS 3966 Studio Art Travel (1-4 Credits)
A travel course to selected locations to visit galleries, museums and artists' studios. Location and content of course change. Variable credit. May be repeated to a maximum of 12 credits. Lab fee.

ARTS 3980 Studio Art Internship (1-4 Credits)
The student is responsible for locating the internship and gaining approval for it, using the internship guidelines and contract form in the art office. Typical internships have been located in commercial galleries, fine art printmaking houses, professional artists' studios and non-profit arts organizations.

ARTS 3991 Independent Study (1-6 Credits)
Supervised studies not addressed in this catalog of classes. Advanced projects must be faculty approved. Permission/registration form is available from the Office of the Registrar.

ARTS 3992 Directed Study (4 Credits)
This class should only be used when a required ARTS 3000-level course listed in this catalog is not offered in the quarter in which the student must take it. Permission of an instructor and the Director of the School of Art and Art History are required. Permission/registration form is available from the Office of the Registrar.

ARTS 3999 Exit Survey (0 Credits)
All majors in the School of Art and Art History are required to register for ARTS 3999 during their final quarter of study at the University of Denver. The course is completed by taking the online exit survey. It does not bear credit; no tuition is assessed and no grade is given. Majors cannot graduate until they complete this requirement. The information from this anonymous survey is used by the school to improve its programs. We greatly appreciate our students' help in this regard.

Art History Courses

ARTH 1010 Images of Culture (4 Credits)
This course looks at artistic creations as an expression of cultural traditions and beliefs. Instead of viewing art as the result of unique geniuses, the fruit of inspired individuals, we explore how artistic objects reflect the ideas of the times and social values held by the society in which they appear. This course counts toward the Analytical Inquiry: Society and Culture requirement.
ARTh 1020 Highlights of Medieval Art (4 Credits)
The era known as the Middle Ages spans over a thousand years and includes many significant works in the history of art. This class endeavors to investigate the ways in which works of medieval art construct and convey meaning. In order to explore these ideas in greater depth, the class focuses on specific works of art that illustrate the richness of the ways in which images convey meaning and the ways of understanding these meanings. As such, it is intended to provide an introduction to ways of reading and interpreting images. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1030 Highlights of Renaissance Art (4 Credits)
The period known as the Renaissance witnessed the production of a tremendous number of artistic masterpieces, but also the formulation of the study of the history of art and the development of art theory. This class endeavors to investigate the ways in which works of Renaissance art construct and convey meaning. In order to explore these ideas in greater depth, the class focuses on specific works of art that illustrate the rich complexities of the ways in which images convey meaning and the ways of understanding these meanings. As such, it is intended to provide an introduction to ways of reading and interpreting images. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1040 Sacred Spaces in Asia (4 Credits)
This course explores a variety of natural and man-made "Sacred Spaces" as it introduces the civilizations and major artistic traditions of India, China and Japan. Illustrated lectures consider public and private environments, their philosophical contexts and religious functions as well as the changing nature of their use and perceived meanings over time. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1050 Highlights of American Art (4 Credits)
This course introduces American art by focusing on a single work of art each week. Through readings, illustrated lectures, discussion and museum visits, we explore the social, political, historical and cultural contexts of each masterwork; learn something about the featured artist's life and artistic processes; and discover related examples of fine and popular art from the seventeenth century to the present. In the process, participants refine their ability to look, describe, analyze and critique the visual. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1060 Contemporary Art Worlds (4 Credits)
Have you ever wondered how a calf suspended in formaldehyde can sell at an art auction for nearly twenty-four million dollars? This class introduces the contemporary art world and explores how art functions within our society. Topics include the art market, the politics of museums, censorship and public funding, and popular cultural representations of the artist. We also look at how contemporary artists are engaging with some of the most important issues of our day. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1070 Artists on Film (4 Credits)
Artists with turbulent lives have often captured the popular imagination. Typically, novels, plays and films about such artists perpetuate myths of tormented souls overcoming hardships, enduring romantic catastrophes and struggling with their creative genius. Usually, the reality is quite different as an artist's path is one of developing talent, hard work, persistence and great personal courage. This class explores the lives and works of several famous artists. We evaluate the myths and the realities of their lives by comparing their art to films and documentaries that have been made about them. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 1992 Directed Study (1-10 Credits)

ARTh 2613 Excavating Italy (4 Credits)
This class provides an introduction to the art, history and literature of the Italian cities of Rome, Florence and Venice from classical antiquity through the High Renaissance, as well as visual and literary responses to Italy by artists and writers. Students are encouraged to recognize the importance of classical architecture and sculpture as the artistic precedents for Renaissance art. We see how religious and literary themes provided much of the iconography of Renaissance painting. Students are also encouraged to become intimately acquainted with the works of a few selected major artists, such as Giotto, Botticelli and Michelangelo, while also developing a wider understanding of the general stylistic features of Italian Renaissance art. The literature component focuses on a variety of genres from classical texts to Shakespeare's Italian plays to British travelers' impressions of Italian artists and scenes. This is a team-taught course. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTh 2801 World Art I: Prehistory to c. 1000 (4 Credits)
This is the first quarter in a three-quarter foundation course in world art. Students will become familiar with significant examples of art, architecture and material culture emerging out of Europe, the Americas and Africa from the Paleolithic era to approximately the year 1000. Students will consider the crucial role of these images and objects in the formation of their respective historical and cultural contexts.

ARTh 2802 World Art II: c.1000-1700 (4 Credits)
This is the second quarter of the three-quarter foundation course in world art. Students will become familiar with significant examples of art, architecture and material culture emerging out of Europe, the Americas, Asia and Africa from approximately the year 1000 to 1700. Students will consider the crucial role of these images and objects in the formation of their respective historical and cultural contexts.

ARTh 2803 World Art III: 1700 to the Present (4 Credits)
This is the third quarter of the three-quarter foundation course in world art. Students will become familiar with significant examples of art, architecture and material culture emerging out of Europe, the Americas, Asia and Africa from approximately the year 1700 to the present. Students will consider the crucial role of these images and objects in the formation of their respective historical and cultural contexts.
ARTH 2814 Medieval Art (4 Credits)
This course examines the art produced in Western Europe and the eastern Mediterranean from the 4th to 14th centuries. From the transition of the Late Roman Empire into new political and artistic climates of the Early Medieval period up through the lavish expanse of Late Gothic art, we will explore the religious, political, cultural, and artistic forces that shaped the creation of artistic monuments for over a thousand years. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTH 2819 Survey of Art I: Caves to Renaissance (4 Credits)
An introduction to the painting, sculpture, architecture, and book illustration of Europe from prehistoric times to 1500. The art of prehistory, the ancient Near East, Egypt, ancient Greece, ancient Rome, as well as Early Christian, Byzantine, Carolingian, Romanesque, Gothic and early Renaissance periods are explored. Major monuments are analyzed according to style, technique, and iconography. Attention is paid to the historical and cultural context in which works of art were produced and used. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTH 2820 Survey of Art II: Renaissance to Present (4 Credits)
An introduction to the art and architecture of Europe and North America from 1500 through the present. The major artists and architects of the following movements are covered: High Italian Renaissance and Northern Renaissance, 17th-century Northern and Southern Baroque, 18th-century Rococo to Revolution, 19th-century Romanticism, Realism, Impressionism and Post-Impressionism; 20th-century Cubism and Abstraction, Dada, Surrealism, Abstract Expressionism, Pop Art and various contemporary art movements. Students develop their ability to analyze the stylistic, iconographic, cultural and technical aspects of art works, while obtaining historical perspectives of the movements and artists covered within the class.

ARTH 2840 Survey of Asian Art (4 Credits)
An introduction to major monuments, traditions and civilizations of India, China and Japan. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ARTH 2992 Directed Study (1-5 Credits)

ARTH 3300 Seminar in Art History (4 Credits)
This seminar is primarily designed to introduce students to the advanced research techniques and methods of art history. The thematic content of this course changes. Students develop skills to analyze scholarly literature, to refine research papers and to deliver oral presentations.

ARTH 3652 Internship (1-4 Credits)
By arrangement, advanced undergraduate art history students may intern in an art gallery, small museum, historic house, non-profit art organization, archive or library. See guidelines and contract form in the School of Art and Art History office.

ARTH 3656 Curatorial Practicum (4 Credits)
Students will work in curatorial teams to plan and execute an effective exhibition of contemporary art. This process may include choosing a theme and selecting works of art, researching artists and themes, budgets, scheduling, developing an exhibition checklist, modeling the gallery, visual exhibition design, conservation and collections management factors, shipping, installation, educational outreach to the public, publicity and other issues related to exhibition planning.

ARTH 3661 Learning in Museums (4 Credits)

ARTH 3701 Topics in Art History (1-4 Credits)
Selected themes and topics from the history of art. Content changes and course may be repeated to a maximum of 12 credits.

ARTH 3813 Arts of the American West (4 Credits)
This class covers a wide range of art objects and styles from the 17th century to the present in the West of the United States, from buffalo robe paintings and baskets to cowboy art and contemporary abstract landscapes. Particular attention is paid to the diversity of art traditions—Native American, Spanish and Mexican, European, Asian and Latin American—as they converge in this geographic space.

ARTH 3815 American Art and Religion (4 Credits)
This class examines sacred art forms, as well as art that documented or commented upon religious experience in the U.S., from the 17th century to the present. In includes fine, decorative, and popular arts as well as architecture, in slide-lecture-discussions and field trips. The diversity of religious experience and spirituality in American art is emphasized.

ARTH 3817 Gothic Art (4 Credits)
This course examines the art of the Late Middle Ages in Europe, from roughly 1140 to 1400. Gothic architecture, sculpture, painting, stained glass and the sumptuous arts (metal, textiles) are examined within their broader social, political and religious contexts. Particular attention is paid to the Gothic Cathedral - that quintessential window into the medieval world--its beliefs, aspirations, social and political realities.

ARTH 3818 Art of Renaissance Europe (4 Credits)
This course provides an examination of the artistic cultures in Europe during the Renaissance (15th and 16th centuries). Depending upon the quarter, this course will be a general survey of European art during the Renaissance or a more focused exploration of a sub-period, such as painting in fifteenth-century Italy. Chronological and geographic factors determine the overall theme and structure of the course. Students gain both a sound knowledge of key artistic monuments of the period, as well as a conceptual framework according to which they may organize their knowledge. This class may be repeated for a maximum of 8 credits.
ARTH 3822 Northern Renaissance Art (4 Credits)
This course explores the dramatic developments in the arts (particularly panel painting, manuscript illumination and sculpture) in Northern Europe from around 1350 to 1550. From lavishly decorated Books of Hours and the development of stunningly naturalistic oil paintings on panel in the early 15th century through the development of printing and the rise of self-portraiture, genre and landscape depictions, this class traces the important role played by Dutch, Flemish, German and French artists in the transition from late medieval to early modern artistic forms and practices. The role of art in shaping and expressing religious, civic, political and economic concepts are explored, as well as the rise of the social and intellectual standing of the artist. Among the artists examined include Jan van Eyck, Rogier van der Weyden, Albrecht Dürer, Hieronymus Bosch and Pieter Bruegel the Elder.

ARTH 3823 17th-Century European Art (4 Credits)
This course considers European arts of the 17th century. Depending upon the quarter it may be a general survey of European art during the seventeenth century or a more focused exploration of a sub-period, such as Italian Baroque or the Old Dutch Masters: Rembrandt, Vermeer and Frans Hals. This class may be repeated for a maximum of 8 credits.

ARTH 3832 19th-Century Art (4 Credits)
This course surveys the major art movements in Europe from the late 18th century to the end of the 19th century. Major painters, sculptors, printmakers and architects of the following movements will be presented: Neo-classicism, Romanticism, Academic Painting, Realism, the Pre-Raphaelites, Impressionism, Post-Impressionism, Symbolism and Art Nouveau. Their works will be studied in light of the social, political and cultural milieu in which they appeared. Special attention will be paid to representations of race, class, gender and colonialism.

ARTH 3833 20th-Century Art (4 Credits)
This class studies the development of early 20th-century art in Europe and the U.S., as the center of the avant-garde shifted to America around World War II. The class follows the development of modernism and its theories from 1900 to around 1960. Artists and movements will be considered according to stylistic and theoretical development, and also in relation to social, political and cultural developments of their time.

ARTH 3834 Contemporary Art (4 Credits)
This course surveys the development of contemporary art, focusing primarily on recent decades, but making connections to earlier movements from 1970 to the present. This includes painting, sculpture, performance art, installations and new media art. Students become familiar with various issues of recent art theory and criticism to put these works into a theoretical perspective. In addition to an in-depth look at the broad stylistic movements of the past forty years, this course also examines those figures whose work has come to define the major approaches and concerns for the art of our time.

ARTH 3838 Connoisseurship (4 Credits)
In this class the historical roots, theoretical and philosophical underpinnings, and actual practice of connoisseurship are studied using objects from the museum's collection.

ARTH 3839 Topics in Modern Art (4 Credits)
Selected themes and topics from the 18th century to the present. Topics change, and the course may be repeated to a maximum of 12 credits.

ARTH 3841 Topics in Chinese Art (4 Credits)
Selected topics in Chinese art. Content changes. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History. Course may be repeated to a maximum of 12 credits. Cross listed with ASIA 2102.

ARTH 3842 Topics in Japanese Art (4 Credits)
Selected topics in Japanese art. Content changes. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History. Course may be repeated to a maximum of 12 credits. Cross listed with ASIA 2105.

ARTH 3845 Chinese Painting: Masters and Masterpieces (4 Credits)
This course explores pictorial art in China from the third century BCE to the present. Cross listed with ASIA 2106.

ARTH 3846 Dada and Surrealism (4 Credits)
This course will survey the development of Dada and Surrealist art from 1916 through 1939, focusing on the painting, sculpture, graphics, photography and films of these movements. The relationships between Dada and Surrealist artists and literary figures will be discussed as well as their shared interests in psychoanalysis, dreams, sexuality and automatic methods of creativity. Cross listed with ASIA 2106.

ARTH 3850 Art and the History of Science (4 Credits)
This course explores the connections between art and the history of science, using a broad span of visual material, mainly European art from the Middle Ages to the present. Coverage of the material is thematic, focusing on three major categories: Art and the Natural World; Art and the Human Body; and Art and the Human Mind. We read a wide variety of art historical articles and selected chapters that examine works of art related in the first section to astronomy, astrology and alchemy; botanical, zoological and geological illustration; and color theory, perspective, optics, maps, contemporary earthworks and ecology. In the second section, we explore the evolution of anatomic illustration, as well as mythic, religious and genre images related to medicine, pharmacy and healing as well as works by contemporary artists who are concerned with genetic codes, hybridization and cloning. In the third section, we examine depictions of human temperaments, emotions and madness through the images of selected artists.

ARTH 3862 Mesoamerican Art (4 Credits)
This course is an introduction to the art and archaeology of the native peoples of Mesoamerica in Pre-Columbian times, or from about 2000 BC to AD 1521. Cultures covered include the Olmec, Teotihuacan, Mixtec, Zapotec, Aztec and others. This class presents the cultural sequence of Pre-Columbian Mesoamerica and explores how the various civilizations of Mesoamerica shared aspects of world-view, cosmology and daily life. Students will be able to identify and discuss how these elements manifested in the architecture and art of Mesoamerican cultures. Furthermore, the course investigates issues of shamanism, kingship and power, warfare, and human sacrifice. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History.
ARTH 3863 Art of the Maya (4 Credits)
This course is an introduction to the art and archaeology of the Maya from about 300 BC to the present. The Maya are perhaps the most famous of the several cultures comprising what is known as Mesoamerica. A highly advanced culture, they built soaring temples, carved elaborate portraits of their kings and developed a complex writing system including a calendar. The course explores these things with a constant eye to understanding the Maya worldview, cosmology and daily life. By the conclusion of the class, students should be able to read their intricate pictures, discuss the strategies of powerful Maya rulers and understand how Maya art and architecture reflect their concepts of time and the cosmos. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History.

ARTH 3864 Buddhism and the Fine Arts (4 Credits)
This survey examines the history, practices, ritual contexts, aesthetics and artistic traditions of Buddhism including architecture, calligraphy, sculpture and painting, in terms of its social and historical context, political and religious functions, as well as issues including artistic production, changing techniques and symbols, and the market/audience. The primary goal is to understand Buddhism as reflected in art and culture.

ARTH 3867 Native American Art (4 Credits)
This course is designed as an introduction to the art and architecture of the native peoples of North America from the earliest signs of humans in North America to the present. Cultures covered include those from the Southwest, the Northwest, the Southeast Ceremonial Complex, the Plains and contemporary Native American artists. By the conclusion of the class, students will understand the cultural sequence and geographic dispersion of native North America. Students will also understand how the various civilizations of North America shared aspects of world-view, cosmology and daily life, and be able to identify and discuss how these elements manifested in the art and architecture of native North American cultures. This class may be used to fulfill the non-Western requirement for majors in the School of Art and Art History.

ARTH 3868 Art of the Andes (4 Credits)
This course is designed as an introduction to the art and architecture of the native Pre-Columbian peoples of the Andes. Cultures covered include Chavin, Nasca, Wari and the Inca.

ARTH 3869 Twentieth-Century Art in Latin America (4 Credits)
This course explores twentieth-century art movements in Latin America. Topics include modernism, indigenism, surrealism, neo-concretism, conceptualism, censorship under dictatorships, and issues in exile and displacement. We also analyze the cultural production of Latinos in the United States and its representation in cultural institutions. Organized both chronologically and geographically, the material has been structured to provide a basic understanding of the methods of art history in relation to Latin American art and to familiarize students with the significant artistic movements and styles that emerged from Latin America in the Twentieth Century.

ARTH 3871 Women in Art (4 Credits)
This course considers the roles of women in art and explores the impact of race, class and gender on art produced from the Middle Ages to the present with discussions of women artists, women patrons and images of women. Cross listed with GWST 3871.

ARTH 3872 Introduction to Conservation (4 Credits)
This lecture course familiarizes the student with the concepts and challenges of conservation, its role in museums and the care of collections. Specific emphasis is given to the materials, structure, deterioration and preservation of material culture. Field trips to various museums and/or workshops to make appropriate display mounts and storage containers enhance the understanding gained from readings and lectures.

ARTH 3873 The Goddess in Art (4 Credits)
This course surveys the image of the goddess in art from prehistoric times until the present day from a feminist perspective. Beginning with anthropological and art historical theories about the numerous female figurines of Paleolithic and Neolithic times, the course continues to explore representations of female goddesses from ancient Mesopotamia, Egypt, Crete, Greece, and Rome. Polarized images of Eve, the Virgin Mary and several female saints during the Middle Ages will be examined. From the Renaissance through the Baroque periods, classical goddesses, especially Venus/Aphrodite, are revived and adapted to both Christian and secular contexts. Images of the sexualized female body will be explored, along with its counterpart, the witch, who was persecuted during the 16th and 17th centuries. This course is interspersed with examples of contemporary art inspired by the “Great Goddess,” especially by feminist artists of the 1970s and 1980s. Some discussion of the goddess as she appears in contemporary popular culture concludes the class. Cross listed with GWST 3873.

ARTH 3875 History of Collections (4 Credits)
This course traces the history of collections from the Renaissance to the present, addressing the interconnections between artists, patrons, dealers, art markets, provenance, connoisseurship and the historical development of museums and private collections. Each week's readings of journal articles and chapters focus on different types of collections or themes, including royal and imperial collections, cabinets of curiosities, excavating and transporting antiquities, British country estates and the Grand Tour, the establishment of national museums, the relationship between American collectors and dealers, ethnographic objects in Western collections, Nazi looting, restorers and forgers, and artists' collections, to name a few.

ARTH 3910 Art History Travel (4 Credits)
A travel course to selected locations to study major monuments and collections of art and architecture. Location and content change. This class may be repeated for a maximum of 8 credits. Prerequisite: instructor's permission.

ARTH 3991 Independent Study (1-10 Credits)
This class should be used for individual study of a special topic that is not offered in the art history curriculum described in this catalog. Permission/registration form is available from the Office of the Registrar.
**Asian Studies**

Office: Sturm Hall, Room 302  
Mail Code: 2000 E. Asbury Ave, Denver, CO 80208  
Phone: 303-871-2152  
Email: gishimat@du.edu  
Web Site: http://www.du.edu/ahss/areasofstudy/joint_dual_programs/asian_studies

The Asian Studies Program takes a multi-disciplinary approach to the cultures, history and languages of China and Japan, with a minor focus on Indian music and religion. We train students to think and write critically about Asian cultures; to conduct original research on issues that are relevant to one or more parts of Asia; and to develop international and intercultural knowledges and skills that are necessary in order to engage meaningfully with people and issues relevant to East Asia.

Majors may find their training valuable in a wide range of careers, given that the tiny minority of graduates of American universities who are skilled in Asian languages and cultures rank among the most desirable employees for many public- and private-sector organizations. Careers for majors include government service, education, journalism, international business and any other job requiring knowledge of and cultural understandings about China or Japan. The academic training that majors receive is competitive with similar programs at peer institutions across the United States, providing a firm basis for applying to graduate programs.

Students are required to take at least two years of Japanese, Chinese or another approved Asian language. First-year language courses may not be used to fulfill this requirement. However, the requirement may be waived for transfer students who have already had at least three years of Asian language training or for students who demonstrate competency in the language. The requirement is also waived for native speakers of Japanese, Chinese or another approved Asian language; such students complete 60 credits of non-language study instead.

Asian Studies majors are strongly encouraged to study in Asia for up to one year; excellent programs exist in Japan, South Korea, China, India and many other countries. In many cases, students can use their financial aid and receive University of Denver course credit for successfully completing study abroad programs. Interested students should consult with their Asian Studies advisor and the Study Abroad Office.

A student wishing to pursue an Asian studies major must make an appointment with the program director, Professor Ginni Ishimatsu (gishimat@du.edu), who assigns an advisor according to the student’s main interests. The student meets quarterly with the program director for approval of courses taken for the major.

### Bachelor of Arts Major Requirements

(183 credits required for the degree (p. 38))

60 credits, including the following:

#### History

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1220</td>
<td>Warring States and Middle Kingdoms</td>
<td>4</td>
</tr>
<tr>
<td>HIST 1230</td>
<td>Asia and the Modern World</td>
<td>4</td>
</tr>
<tr>
<td>HIST 2810/ASIA 2403</td>
<td>Modern Japan</td>
<td>4</td>
</tr>
<tr>
<td>HIST 2850</td>
<td>Imperial China</td>
<td>4</td>
</tr>
<tr>
<td>HIST/ASIA 2870</td>
<td>Modern China</td>
<td>4</td>
</tr>
<tr>
<td>HIST 3861/ASIA 2414</td>
<td>American Occupation of Japan</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Religious Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLGS 2103/ASIA 2702</td>
<td>Religions of China &amp; Japan</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 2109</td>
<td>Religions of Tibet</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 3814/ASIA 2703</td>
<td>Modern Hinduism</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 3820/ASIA 2704</td>
<td>Buddhism</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 3830</td>
<td>Buddhist Lives</td>
<td>4</td>
</tr>
</tbody>
</table>

Two years of intermediate and advanced Japanese, Chinese or another approved Asian language

---

1. According to the requirements, two years of intermediate and advanced Asian language courses are required for the major.
### Senior Thesis Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA 3901</td>
<td>ASIAN Studies Directed Readings</td>
</tr>
<tr>
<td>ASIA 3902</td>
<td>ASIAN Studies Senior Thesis</td>
</tr>
</tbody>
</table>

### Electives

Select four courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 1040</td>
<td>Sacred Spaces in Asia</td>
</tr>
<tr>
<td>ARTH 2840</td>
<td>Survey of Asian Art</td>
</tr>
<tr>
<td>ARTH 3841/ASIA 2102</td>
<td>Topics in Chinese Art</td>
</tr>
<tr>
<td>ARTH 3842/ASIA 2105</td>
<td>Topics in Japanese Art</td>
</tr>
<tr>
<td>ARTH 3864</td>
<td>Buddhism and the Fine Arts</td>
</tr>
<tr>
<td>ASEM 2421</td>
<td>War and Peace in Japanese Film</td>
</tr>
<tr>
<td>ASEM 2643</td>
<td>Comparative Democratization: East and West</td>
</tr>
<tr>
<td>ASEM 2646</td>
<td>Dance in India</td>
</tr>
<tr>
<td>ASEM 2662</td>
<td>Testimony, Memory and Allegory: the Representations of the Chinese Cultural Revolution</td>
</tr>
<tr>
<td>CHIN/ASIA 1516</td>
<td>Contemporary China in Literature and Films</td>
</tr>
<tr>
<td>ECON 2330</td>
<td>China and the Global Economy</td>
</tr>
<tr>
<td>ECON 2510</td>
<td>The Asian Economies</td>
</tr>
<tr>
<td>JAPN 1416</td>
<td>Postwar Japan: Changing Perspectives in Literature and Culture</td>
</tr>
<tr>
<td>JAPN 1616</td>
<td>Samurai and Merchants: Cultures of Tokugawa Japan</td>
</tr>
<tr>
<td>MUEN 3041</td>
<td>North Indian Classical Ensemble</td>
</tr>
<tr>
<td>PLSC 1110</td>
<td>Comparing Politics around the World</td>
</tr>
<tr>
<td>PLSC 2200</td>
<td>Politics of China</td>
</tr>
<tr>
<td>PLSC 2260/ASIA 2601</td>
<td>Politics of Japan</td>
</tr>
<tr>
<td>RLGS 3816/ASIA 2706</td>
<td>Hinduism Through Texts</td>
</tr>
<tr>
<td>RLGS 3832</td>
<td>Religious Lives: The Dalai Lamas</td>
</tr>
</tbody>
</table>

### Total Credits

60

1 Contact the department program director, Dr. Ginni Ishimatsu (gishimat@du.edu), for questions about language credits.

### Minor Requirements

24 credits, including the following. Please consult the list of courses under the major requirements above for approved Asian Studies courses. Note: Up to eight credits of intermediate or advanced language study may be used to fulfill requirements for the minor.

#### History: Japan and China

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1220</td>
<td>Warring States and Middle Kingdoms</td>
</tr>
<tr>
<td>HIST 1230</td>
<td>Asia and the Modern World</td>
</tr>
<tr>
<td>HIST 2810/ASIA 2403</td>
<td>Modern Japan</td>
</tr>
<tr>
<td>HIST 2850</td>
<td>Imperial China</td>
</tr>
<tr>
<td>HIST/ASIA 2870</td>
<td>Modern China</td>
</tr>
<tr>
<td>HIST 3861/ASIA 2414</td>
<td>American Occupation of Japan</td>
</tr>
</tbody>
</table>

#### Religious studies: Religions of East Asia or South Asia

Select one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLGS 2103/ASIA 2702</td>
<td>Religions of China &amp; Japan</td>
</tr>
<tr>
<td>RLGS 2109</td>
<td>Religions of Tibet</td>
</tr>
<tr>
<td>RLGS 3814/ASIA 2703</td>
<td>Modern Hinduism</td>
</tr>
<tr>
<td>RLGS 3820/ASIA 2704</td>
<td>Buddhism</td>
</tr>
<tr>
<td>RLGS 3830</td>
<td>Buddhist Lives</td>
</tr>
</tbody>
</table>

### Electives

Select three courses from the list of major electives

### Total Credits

24
Courses

ASIA 1516 Contemporary China in Literature and Films (4 Credits)
This course investigates, through critically examining the representative literary and filmic texts produced by Chinese as well as foreign writers and filmmakers, the many complicated aspects of some much-talked about issues. This includes the diminishing rural life and landscape, urbanization, migration/dislocation, the changing roles of women, social equality, as well as the balancing act of preserving tradition, the environment, and economic development. The in-depth examination and diverse approaches this course applies enables students to gain greater understanding of not only the challenges that contemporary China has raised, but also the complexities of the increasingly globalized world in which we are living. Cross listed with CHIN 1516. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ASIA 2102 Topics in Chinese Art (4 Credits)
Selected topics in Chinese Art. Content changes. Course may be taken more than once. Cross listed with ARTH 3841.

ASIA 2105 Topics in Japanese Art (4 Credits)
Selected topics in Japanese Art. Content changes. Course may be taken more than once. Cross listed with ARTH 3842.

ASIA 2106 Chinese Painting: Masters and Masterpieces (4 Credits)
Exploration of pictorial art in China from the third century BCE to the present. Cross listed with ARTH 3846.

ASIA 2395 Contemporary India, 1947-2000 (4 Credits)
This course examines the history of India after independence from Britain in 1947. It traces the historical roots of the economy, society and polity of contemporary India. Understanding the hot button issues of the Kashmir conflict, nuclear weaponization, globalization and terrorism cannot be separated from and requires a historical grasp of the underlying processes of state formation, national identity, economic development and gender and social empowerment that have characterized India. While India will be the main focus, South Asia's shared colonial history and its legacies mean that the issues of regional tensions, ethnic and gender conflict, communal violence, secularism, the unevenness of electoral democracy and the fragility of civil society have wider application in the subcontinent as a whole. Therefore, the course constantly and continuously draws useful comparisons with events and processes in other South Asian nations such as Pakistan, Bangladesh, Sri Lanka, Nepal and Bhutan. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with HIST 2395.

ASIA 2403 Modern Japan (4 Credits)
Themes in early and late modern Japan - ideology and politics, culture and society, class and gender, empire and nation, Japan from Tokugawa peace through modern wars to post-war world. Cross listed with HIST 2810.

ASIA 2404 Contemporary Japan (4 Credits)
This course uses contemporary Japanese culture to examine political and social trends. Cross listed with HIST 2820.

ASIA 2414 American Occupation of Japan (4 Credits)
Studies the important issues in a vital period of both U.S. and Japanese history. Cross listed with HIST 3861.

ASIA 2601 Japanese Politics (4 Credits)
How did Japan rapidly catch up with more advanced industrial powers? Can other developing countries copy the Japanese model? What was the "darker side" behind Japan's economic miracle? How do we come to terms with the sudden burst of Japan's "Bubble Economy?" Will Japan's current economic recovery process, which started in 2002, be sustainable? Is a genuine international reconciliation between Japan and its neighbors possible? These are just some of the questions we will examine in this class. Prerequisite: sophomore standing. Cross listed with PLSC 2260.

ASIA 2701 Topics in Asian Studies (1-4 Credits)

ASIA 2702 Religions of China & Japan (4 Credits)
This is an introduction of some of the major East Asian religious and ethical traditions, focusing on Buddhism, Confucianism, Daoism, and Shinto. By examining both translations of sacred texts as well as scholarly analyses, we explore the basic ideas, practices, and historical development of these varied and interconnected traditions. Special attention is paid to how people incorporate East Asian religious and ethical ideas and beliefs into contemporary life and how gender shapes the experience of religion. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2103.

ASIA 2703 Modern Hinduism (4 Credits)
Doctrines, practices and history of South Asian Hinduism; conceptions of the sacred, paths to liberation and modern religious attitudes. Cross listed with RLGS 3814.

ASIA 2704 Buddhism (4 Credits)
Buddhist life and thought from origins to present in India, Tibet, Japan and China. Cross listed with RLGS 3820.

ASIA 2706 Hinduism through Sacred Texts (4 Credits)
Historical development of Hinduism from its Vedic and indigenous antecedents to its medieval and modern manifestations in literature, doctrine, ritual, and art. Cross listed with RLGS 3816.

ASIA 2870 Modern China (4 Credits)
In this class we focus on China from the nineteenth century to the present. We examine historical change and continuity, including the revolutions that created the Republic of China and the People's Republic of China, the transformation of traditional values, changes in the status of women, economic liberalization in the post-Mao Zedong era, and the political, social, and environmental challenges that China has faced in recent years. Cross listed with HIST 2870.
ASIA 3701 Topics in Asian Studies (1-4 Credits)
Specialized topics in Asian Studies. Topic varies per offering. Check with the Asian Studies program director for more information. Open to majors and non-majors. May be repeated for credit.

ASIA 3830 Buddhist Lives (4 Credits)
This course explores the literary canon of Buddhist life stories across time, traditions and cultures. Cross-listed with RLGS 3830.

ASIA 3901 Asian Studies Directed Readings (4 Credits)
Students will read deeply in a specific field of scholarship directed by a core faculty member in the Asian Studies program and will write a methodological essay that discusses the scholarship in their chosen field of research. This is the first part of a required, two-quarter sequence that will culminate in the senior thesis. Enrollment is restricted to Asian Studies majors.

ASIA 3902 Asian Studies Senior Thesis (4 Credits)
Students will pursue a primary document research project under the supervision of their core faculty member in Asian Studies. The goal of this course is the writing and completion of the senior thesis in Asian Studies. Prerequisite: ASIA 3901.

ASIA 3980 Asian Studies Internship (1-4 Credits)
Provides academic credit for off-campus internships in areas related to the Asian Studies major. The purpose of the internship is the gain valuable work experience, explore various career options, develop job competencies and/or apply theoretical knowledge to practical concerns of the world. Must be an Asian Studies major and have cumulative GPA of 3.0 and have taken at least two Asian Studies content courses, not counting language training. Requires approval of Asian Studies director.

ASIA 3991 Independent Study (1-4 Credits)

Department of Biological Sciences

Office:  F.W. Olin Hall, Room 102
Mail Code:  2190 E. Iliff Ave. Denver, CO 80208
Phone:  303-871-3661
Fax:  303-871-3471
Email:  biology@du.edu  (Biology@du.edu)
Web Site:  http:\biology.du.edu

The Department of Biological Sciences offers four distinct life sciences majors provided by a nationally recognized faculty that excels in teaching and research. Many faculty members have received University wide recognition for outstanding teaching. Research programs are funded by grants from agencies such as the National Institutes of Health and the National Science Foundation.

The department has three excellent teaching and research facilities. F.W. Olin Hall is a state-of-the-art facility for lectures and laboratories. Faculty offices and research labs are located across the science quad from Olin Hall in the Seeley G. Mudd building, which has teaching laboratories for advanced technique courses in molecular biology, cell biology and microbiology. Field-oriented courses are offered at the Mount Evans Field Station.

The up-to-date and highly integrated curriculum provides a sound foundation in molecular, cellular, developmental, organismal, ecological and environmental biology. The curriculum prepares students for futures in medicine, dentistry, veterinary medicine, graduate programs in the life sciences, graduate programs in health-related fields like physical therapy or physician assistant programs, ecology, environmental science, conservation biology and science education at the secondary school level.

Programs of Study in Biological Sciences

The department offers majors in the following areas: biological sciences, molecular biology, ecology and biodiversity, and integrated sciences.

Biological Sciences

The biological sciences major provides a curriculum that encompasses the spectrum of disciplines in the life sciences.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

45 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
<td></td>
</tr>
</tbody>
</table>
## Additional Requirements

The BA requires either one year of Chemistry or a minor in Chemistry. In addition, eight credits of Mathematics are required.

### Chemistry

Chemistry coursework requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2000 level course or higher (at least 4 credits)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mathematics

Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td>and Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td>and Introduction to Statistics</td>
<td></td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td>and Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td>and Introduction to Statistics</td>
<td></td>
</tr>
</tbody>
</table>

### Bachelor of Science Major Requirements

(183 credits required (p. 40) for the degree (p. 38)) (p. 40)

45 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2510</td>
<td>General Genetics</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 2511</td>
<td>and General Genetics Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2010</td>
<td>General Ecology</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 2011</td>
<td>and General Ecology Lab</td>
<td></td>
</tr>
</tbody>
</table>

Additional Biology electives at the 2000 or 3000 level \(^1\)

| Credits |
|---------|---------|
| 20      |         |

**Total Credits**

| Credits |
|---------|---------|
| 45      |         |
## Additional Requirements

Two minors are required for the BS, one of which must be Chemistry. In addition, one year of Physics and one year of Mathematics are required.

### Chemistry

Chemistry minor coursework requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
</tr>
</tbody>
</table>

### Physics

One year of Physics with lab. Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111</td>
<td>General Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 1112</td>
<td>and General Physics II</td>
</tr>
<tr>
<td>&amp; PHYS 1113</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 1212</td>
<td>and University Physics II</td>
</tr>
<tr>
<td>&amp; PHYS 1213</td>
<td></td>
</tr>
</tbody>
</table>

### Mathematics

One year of Calculus. Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; MATH 1953</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td>and Biostatistics</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td>and Introduction to Statistics</td>
</tr>
</tbody>
</table>

### Total Credits

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
</tr>
</tbody>
</table>

1. Only six credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the 45-credit requirement for the major.

## Requirements for the Cognitive Neuroscience Concentration: Biological Sciences Majors

45 credits of biology. Required coursework includes those listed for the BA or BS major program in biological sciences. In addition, students must complete:

### BA or BS Biological Sciences major required coursework

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3646</td>
<td>Seminar: Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

### Any three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3160</td>
<td>Biophysics: Ion Channels &amp; Disease</td>
</tr>
<tr>
<td>BIOL 3640</td>
<td>Introductory Neurobiology</td>
</tr>
<tr>
<td>BIOL 3641</td>
<td>Systems Neuroscience</td>
</tr>
<tr>
<td>BIOL 3642</td>
<td>Neuropharmacology</td>
</tr>
<tr>
<td>BIOL 3644</td>
<td>Neuromuscular Pathophysiology</td>
</tr>
</tbody>
</table>
BIOL 3650  
Endocrinology  
Additional Biology electives at the 2000 or 3000 level  

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

**Total Credits**  
45

### Additional Requirements: Bachelor of Arts

The Psychology minor is required for the BA. In addition, one year of Chemistry and eight credits of Mathematics are required.

**Psychology minor for Cognitive Neuroscience students**  
20

See Psychology department for requirements.

#### Chemistry

Chemistry coursework requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010 &amp; CHEM 1240</td>
<td>General Chemistry and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451 &amp; CHEM 2461</td>
<td>Organic Chemistry I and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2000 level course or higher (at least 4 credits)</td>
<td></td>
</tr>
</tbody>
</table>

#### Mathematics

Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951 &amp; MATH 1952</td>
<td>Calculus I and Calculus II</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1951 &amp; BIOL 2090</td>
<td>Calculus I and Biostatistics</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1951 &amp; PSYC 2300</td>
<td>Calculus I and Introduction to Statistics</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1200 &amp; BIOL 2090</td>
<td>Calculus for Business and Social Sciences and Biostatistics</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 1200 &amp; PSYC 2300</td>
<td>Calculus for Business and Social Sciences and Introduction to Statistics</td>
</tr>
</tbody>
</table>

**Total Credits**  
40-48

### Additional Requirements: Bachelor of Science

Two minors are required for the BS, one of which must be Chemistry with the second minor in Psychology. In addition, one year of Physics and one year of Mathematics are required.

**Psychology minor for Cognitive Neuroscience students**  
20

See Psychology department for requirements.

#### Chemistry

Chemistry minor coursework requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010 &amp; CHEM 1240</td>
<td>General Chemistry and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451 &amp; CHEM 2461</td>
<td>Organic Chemistry I and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452 &amp; CHEM 2462</td>
<td>Organic Chemistry II and Organic Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 2453 &amp; CHEM 2463</td>
<td>Organic Chemistry III and Organic Chemistry Lab III</td>
</tr>
<tr>
<td>CHEM 2111 &amp; CHEM 2041</td>
<td>Analysis Equilibrium Systems and Analysis Equilibrium Systems Lab</td>
</tr>
</tbody>
</table>

#### Physics

One year of Physics with lab. Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
</table>
PHYS 1111 & PHYS 1112 & PHYS 1113
General Physics I and General Physics II and General Physics III

or

PHYS 1211 & PHYS 1212 & PHYS 1213
University Physics I and University Physics II and University Physics III

Mathematics
One year of Calculus. Select one of the following:

MATH 1951 & MATH 1952 & MATH 1953
Calculus I and Calculus II and Calculus III

or

MATH 1951 & MATH 1952 & BIOL 2090
Calculus I and Calculus II and Biostatistics

or

MATH 1951 & MATH 1952 & PSYC 2300
Calculus I and Calculus II and Introduction to Statistics

Total Credits 67

1 Only six credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the credit requirement for the major.

Minor Requirements
20 credits of biology. Requirements include:

BIOL 1010 & BIOL 1020
Physiological Systems and Physiological Systems Lab

BIOL 1011 & BIOL 1021
Evolution, Heredity and Biodiversity and Evolution, Heredity and Biodiversity Lab

10 credits of courses at the 2000 level or above

Total Credits 20

Cognitive Neuroscience
Cognitive Neuroscience Concentration: Biological Sciences Minor (with Psychology Major)
The minor requirements listed apply only to students completing a Psychology major with a Cognitive Neuroscience concentration. Please see the Department of Psychology (p. 332) for Psychology minor requirements associated with this concentration.

Minimum of 20 credits as follows:

BIOL 1010 & BIOL 1020
Physiological Systems and Physiological Systems Lab

BIOL 1011 & BIOL 1021
Evolution, Heredity and Biodiversity and Evolution, Heredity and Biodiversity Lab

BIOL 2120 & BIOL 2121
Cell Structure and Function and Cell Structure & Function Lab

At least two of the following courses:

BIOL 3160 Biophysics: Ion Channels & Disease
BIOL 3640 Introductory Neurobiology
BIOL 3641 Systems Neuroscience
BIOL 3642 Neuropharmacology
BIOL 3644 Neuromuscular Pathophysiology
Molecular Biology Major

The Molecular Biology major features upper-division courses that share the common theme of gene expression in biological systems and cellular function. This major is intended for students interested in professional postgraduate programs (medicine, dentistry, veterinary medicine), graduate programs in the life sciences and careers in the biotech industry. Students interested in biotech careers are encouraged to consider completing a master of business administration (MBA). See the chair of Biological Sciences (Olin Hall, room 102) for details concerning this dual degree program.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

44 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
</tr>
<tr>
<td>BIOL 2510</td>
<td>General Genetics</td>
</tr>
<tr>
<td>&amp; BIOL 2511</td>
<td>and General Genetics Lab</td>
</tr>
<tr>
<td>BIOL 3800</td>
<td>Human Molecular Biology</td>
</tr>
</tbody>
</table>

Any 3000-level BIOL course in addition to the lab and category requirements below

Molecular Biology lab/research requirement
BIOL 3560 Molecular Biology Laboratory 4

Category Elective Courses (minimum of three courses) 12

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3120</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>BIOL 3130</td>
<td>Molecular Evolution</td>
</tr>
<tr>
<td>BIOL 3150</td>
<td>Intracellular Dynamics</td>
</tr>
<tr>
<td>BIOL 3160</td>
<td>Biophysics: Ion Channels &amp; Disease</td>
</tr>
<tr>
<td>BIOL 3570</td>
<td>Proteins in Biological Systems</td>
</tr>
<tr>
<td>BIOL 3610</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>BIOL 3630</td>
<td>Cell Biology of Development</td>
</tr>
<tr>
<td>BIOL 3640</td>
<td>Introductory Neurobiology</td>
</tr>
<tr>
<td>BIOL 3642</td>
<td>Neuropharmacology</td>
</tr>
<tr>
<td>BIOL 3644</td>
<td>Neuromuscular Pathophysiology</td>
</tr>
<tr>
<td>BIOL 3650</td>
<td>Endocrinology</td>
</tr>
<tr>
<td>BIOL 3670</td>
<td>Molecular Immunology</td>
</tr>
<tr>
<td>BIOL 3705</td>
<td>Advanced Topics in Molecular Biology</td>
</tr>
<tr>
<td>BIOL 3910</td>
<td>Viruses &amp; Infectious Human Diseases</td>
</tr>
</tbody>
</table>

Total Credits 44

Additional Requirements

The BA requires a minor in Chemistry. In addition, eight credits of Mathematics are required.

Chemistry

Chemistry minor course work requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
</tr>
</tbody>
</table>
At least eight additional hours of 2000-level or higher course work

**Mathematics**

Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course Combination</th>
<th>Description</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1200 &amp; PSYC 2300</td>
<td>Calculus for Business and Social Sciences and Introduction to Statistics</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1200 &amp; BIOL 2090</td>
<td>Calculus for Business and Social Sciences and Biostatistics</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1951 &amp; PSYC 2300</td>
<td>Calculus I and Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1951 &amp; BIOL 2090</td>
<td>Calculus I and Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**

28

1 Only five credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the credit requirement for the major.

**Bachelor of Science Major Requirements**

(183 credits required for the degree) (p. 40)

50 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2510</td>
<td>General Genetics</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2511</td>
<td>and General Genetics Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 3800</td>
<td>Human Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>Any 3000-level BIOL course in addition to the lab and category requirements below</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 3560</td>
<td>Molecular Biology Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

**Category Elective Courses (minimum of three courses)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3120</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>BIOL 3130</td>
<td>Molecular Evolution</td>
</tr>
<tr>
<td>BIOL 3150</td>
<td>Intracellular Dynamics</td>
</tr>
<tr>
<td>BIOL 3160</td>
<td>Biophysics: Ion Channels &amp; Disease</td>
</tr>
<tr>
<td>BIOL 3570</td>
<td>Proteins in Biological Systems</td>
</tr>
<tr>
<td>BIOL 3610</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>BIOL 3630</td>
<td>Cell Biology of Development</td>
</tr>
<tr>
<td>BIOL 3640</td>
<td>Introductory Neurobiology</td>
</tr>
<tr>
<td>BIOL 3642</td>
<td>Neuropharmacology</td>
</tr>
<tr>
<td>BIOL 3644</td>
<td>Neuromuscular Pathophysiology</td>
</tr>
<tr>
<td>BIOL 3650</td>
<td>Endocrinology</td>
</tr>
<tr>
<td>BIOL 3670</td>
<td>Molecular Immunology</td>
</tr>
<tr>
<td>BIOL 3705</td>
<td>Advanced Topics in Molecular Biology</td>
</tr>
<tr>
<td>BIOL 3910</td>
<td>Viruses &amp; Infectious Human Diseases</td>
</tr>
</tbody>
</table>

**Additional Biology electives at the 2000 or 3000 level**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
</table>

**Total Credits**

50

**Additional Requirements**

The BS requires two minors--one of which must be Chemistry. In addition, one year of Mathematics and one year of Physics are required.
### Chemistry

Chemistry minor course work requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
</tr>
</tbody>
</table>

### Physics

One year of Physics with lab. Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111</td>
<td>General Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 1112</td>
<td>and General Physics II</td>
</tr>
<tr>
<td>&amp; PHYS 1113</td>
<td>and General Physics III</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
</tr>
<tr>
<td>&amp; PHYS 1212</td>
<td>and University Physics II</td>
</tr>
<tr>
<td>&amp; PHYS 1213</td>
<td>and University Physics III</td>
</tr>
</tbody>
</table>

### Mathematics

Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; MATH 1953</td>
<td>and Calculus III</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td>and Biostatistics</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>&amp; MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td>and Introduction to Statistics</td>
</tr>
</tbody>
</table>

### Total Credits

47

1 Only six credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the credit requirement for the major.

### Cognitive Neuroscience Concentration: Molecular Biology Major

44 credits of biology (BA); 50 credits of biology (BS). Required coursework includes those listed for the BA or BS major program in molecular biology. In addition, students must complete:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA or BS Molecular Biology major required coursework</td>
<td></td>
</tr>
<tr>
<td>BIOL 3646</td>
<td>Seminar: Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3160</td>
<td>Biophysics: Ion Channels &amp; Disease</td>
</tr>
<tr>
<td>BIOL 3640</td>
<td>Introductory Neurobiology</td>
</tr>
<tr>
<td>BIOL 3641</td>
<td>Systems Neuroscience</td>
</tr>
<tr>
<td>BIOL 3642</td>
<td>Neuropharmacology</td>
</tr>
<tr>
<td>BIOL 3644</td>
<td>Neuromuscular Pathophysiology</td>
</tr>
<tr>
<td>BIOL 3650</td>
<td>Endocrinology</td>
</tr>
</tbody>
</table>

Additional Biology electives at the 2000 or 3000 level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
</table>

Total Credits

44-50
Additional Requirements for the Bachelor of Arts Degree

The BA requires a minor in Chemistry as well as the Cognitive Neuroscience Psychology minor. In addition, eight credits of Mathematics are required.

Cognitive Neuroscience Psychology minor
Refer to Psychology for requirements

Chemistry
Chemistry minor course work requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010 &amp; CHEM 1240</td>
<td>20</td>
<td>General Chemistry and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451 &amp; CHEM 2461</td>
<td>20</td>
<td>Organic Chemistry I and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452 &amp; CHEM 2462</td>
<td>20</td>
<td>Organic Chemistry II and Organic Chemistry Lab II</td>
</tr>
</tbody>
</table>

At least eight additional hours of 2000-level or higher course work

Mathematics
Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1200 &amp; PSYC 2300</td>
<td>8</td>
<td>Calculus for Business and Social Sciences and Introduction to Statistics</td>
</tr>
<tr>
<td>MATH 1200 &amp; BIOL 2090</td>
<td>8</td>
<td>Calculus for Business and Social Sciences and Biostatistics</td>
</tr>
<tr>
<td>MATH 1951 &amp; PSYC 2300</td>
<td>8</td>
<td>Calculus I and Introduction to Statistics</td>
</tr>
<tr>
<td>MATH 1951 &amp; BIOL 2090</td>
<td>8</td>
<td>Calculus I and Biostatistics</td>
</tr>
</tbody>
</table>

Total Credits 48

Additional Requirements for the Bachelor of Science Degree

The BS requires two minors—one of which must be Chemistry. The other minor is Cognitive Neuroscience Psychology minor. In addition, one year of Mathematics and one year of Physics are required.

Cognitive Neuroscience Psychology minor
Refer to Psychology for requirements

Chemistry
Chemistry minor course work requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010 &amp; CHEM 1240</td>
<td>20</td>
<td>General Chemistry and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451 &amp; CHEM 2461</td>
<td>20</td>
<td>Organic Chemistry I and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2452 &amp; CHEM 2462</td>
<td>20</td>
<td>Organic Chemistry II and Organic Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 2453 &amp; CHEM 2463</td>
<td>20</td>
<td>Organic Chemistry III and Organic Chemistry Lab III</td>
</tr>
<tr>
<td>CHEM 2011 &amp; CHEM 2041</td>
<td>20</td>
<td>Analysis Equilibrium Systems and Analysis Equilibrium Systems Lab</td>
</tr>
</tbody>
</table>

Physics
One year of Physics with lab. Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111 &amp; PHYS 1112 &amp; PHYS 1113</td>
<td>15</td>
<td>General Physics I and General Physics II and General Physics III</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PHYS 1211 & PHYS 1212 & PHYS 1213  
University Physics I and University Physics II and University Physics III

Mathematics

Select one of the following combinations  

<table>
<thead>
<tr>
<th>MATH 1951 &amp; MATH 1952 &amp; MATH 1953</th>
<th>Calculus I and Calculus II and Calculus III</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>MATH 1951 &amp; MATH 1952 &amp; BIOL 2090</th>
<th>Calculus I and Calculus II and Biostatistics</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MATH 1951 &amp; MATH 1952 &amp; PSYC 2300</th>
<th>Calculus I and Calculus II and Introduction to Statistics</th>
</tr>
</thead>
</table>

Total Credits  

67

1 Only six credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the credit requirement for the major.

Ecology and Biodiversity Major

The Ecology and Biodiversity major focuses on topics in the life sciences at the organismal and ecosystem levels. It is intended for students interested in graduate programs in ecology, conservation biology, evolution or environmental sciences.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

44 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>BIOL 1010 &amp; BIOL 1020</th>
<th>Physiological Systems and Physiological Systems Lab 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1011 &amp; BIOL 1021</td>
<td>Evolution, Heredity and Biodiversity and Evolution, Heredity and Biodiversity Lab 5</td>
</tr>
<tr>
<td>BIOL 2010 &amp; BIOL 2011</td>
<td>General Ecology and General Ecology Lab 5</td>
</tr>
<tr>
<td>BIOL 2050 &amp; BIOL 2051</td>
<td>Conservation Biology and Conservation Biology Lab 5</td>
</tr>
<tr>
<td>BIOL 2510 &amp; BIOL 2511</td>
<td>General Genetics and General Genetics Lab 5</td>
</tr>
</tbody>
</table>

Field course requirement

BIOL 3030  
Alpine Ecology 4

or  
BIOL 3070  
Ecological Field Methods

Category elective courses 1

Select three courses from the following 12

| BIOL 3010 & BIOL 3020 & BIOL 3030 & BIOL 3035 & BIOL 3060 & BIOL 3085 & BIOL 3090 & BIOL 3095 & BIOL 3110 & BIOL 3120 |

1 Only six credits of BIOL 3950 Undergraduate Research and/or BIOL 3991 Independent Study may be counted toward the credit requirement for the major.
### Additional Biology electives at the 2000 or 3000 level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3130</td>
<td>Molecular Evolution</td>
</tr>
<tr>
<td>BIOL 3200</td>
<td>Invertebrate Evolution</td>
</tr>
<tr>
<td>BIOL 3410</td>
<td>Animal Behavior</td>
</tr>
<tr>
<td>BIOL 3700</td>
<td>Topics in Ecology</td>
</tr>
<tr>
<td></td>
<td>Additional Biology electives</td>
</tr>
</tbody>
</table>

**Total Credits: 3**

### Additional Requirements

#### Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
</tbody>
</table>

**Total Credits: 4**

#### Mathematics

Select one of the following combinations:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1200</td>
<td>Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td>and Biostatistics</td>
</tr>
<tr>
<td>or</td>
<td>Calculus for Business and Social Sciences</td>
</tr>
<tr>
<td>MATH 1200</td>
<td>and Introduction to Statistics</td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>and Biostatistics</td>
</tr>
<tr>
<td>&amp; BIOL 2090</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>and Introduction to Statistics</td>
</tr>
<tr>
<td>&amp; PSYC 2300</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 12**

### Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

49 credits of biology. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
</tr>
<tr>
<td>BIOL 2010</td>
<td>General Ecology</td>
</tr>
<tr>
<td>&amp; BIOL 2011</td>
<td>and General Ecology Lab</td>
</tr>
<tr>
<td>BIOL 2050</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>&amp; BIOL 2051</td>
<td>and Conservation Biology Lab</td>
</tr>
<tr>
<td>BIOL 2510</td>
<td>General Genetics</td>
</tr>
<tr>
<td>&amp; BIOL 2511</td>
<td>and General Genetics Lab</td>
</tr>
<tr>
<td>BIOL 2090</td>
<td>Biostatistics</td>
</tr>
</tbody>
</table>

**Field course requirement: 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3030</td>
<td>Alpine Ecology</td>
</tr>
<tr>
<td>or BIOL 3070</td>
<td>Ecological Field Methods</td>
</tr>
</tbody>
</table>

**Category elective courses:**

Minimum of three courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3010</td>
<td>Evolution and Speciation</td>
</tr>
<tr>
<td>BIOL 3020</td>
<td>Aquatic Ecology</td>
</tr>
<tr>
<td>BIOL 3030</td>
<td>Alpine Ecology</td>
</tr>
<tr>
<td>BIOL 3035</td>
<td>Invasive Species Ecology</td>
</tr>
<tr>
<td>BIOL 3060</td>
<td>Tropical Ecology</td>
</tr>
<tr>
<td>BIOL 3085</td>
<td>Insect Ecology</td>
</tr>
<tr>
<td>BIOL 3090</td>
<td>Microbial Ecology</td>
</tr>
</tbody>
</table>

**Total Credits: 12**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3095</td>
<td>Global Change Ecology</td>
</tr>
<tr>
<td>BIOL 3110</td>
<td>Special Topics: Biology</td>
</tr>
<tr>
<td>BIOL 3120</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>BIOL 3130</td>
<td>Molecular Evolution</td>
</tr>
<tr>
<td>BIOL 3200</td>
<td>Invertebrate Evolution</td>
</tr>
<tr>
<td>BIOL 3410</td>
<td>Animal Behavior</td>
</tr>
<tr>
<td>BIOL 3700</td>
<td>Topics in Ecology</td>
</tr>
</tbody>
</table>

Additional Biology electives at the 2000 or 3000 level  

**Total Credits**  

### Additional Requirements

In addition, students must complete one year of Chemistry, Physics and Calculus

#### Chemistry

One year with lab  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 2240</td>
<td>Introduction to Environmental Chemistry</td>
</tr>
</tbody>
</table>

**Chemistry**  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS 1112</td>
<td>and General Physics II</td>
</tr>
<tr>
<td>PHYS 1113</td>
<td>and General Physics III</td>
</tr>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>and University Physics II</td>
</tr>
<tr>
<td>PHYS 1213</td>
<td>and University Physics III</td>
</tr>
</tbody>
</table>

**Physics**  

Choose one of the following combinations:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>MATH 1953</td>
<td>and Calculus III</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>and Calculus II</td>
</tr>
<tr>
<td>MATH 1953</td>
<td>and Calculus III</td>
</tr>
</tbody>
</table>

**Mathematics**  

**Total Credits**  

1 Only 5 credits of Undergraduate Research (BIOL 3950) and/or Independent Study (BIOL 3991) may be counted toward the credit requirement for the major.

2 Only 6 credits of Undergraduate Research (BIOL 3950) and/or Independent Study (BIOL 3991) may be counted toward the 45-credit requirement for the major.

**Courses**

**BIOL 1010 Physiological Systems (4 Credits)**  
The second required course in the introductory biology sequence required for students majoring in Biology or another science. Emphasis on physiology and development of plants and animals. Must be a declared science major or biology minor. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: BIOL 1020 lab section.

**BIOL 1011 Evolution, Heredity and Biodiversity (4 Credits)**  
The first required courses in the introductory biology sequence required for students majoring in Biology or another science. Emphasis on evolution, basic genetics and inheritance, and biodiversity. Must be a declared science major or biology minor. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: BIOL 1021 lab section.
BIOL 1020 Physiological Systems Lab (1 Credit)
Exercises and experimentation to complement lecture material. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: BIOL 1010 lecture section.

BIOL 1021 Evolution, Heredity and Biodiversity Lab (1 Credit)
Exercises and experimentation to complement lecture material. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: BIOL 1011 lecture section.

BIOL 1207 Ecology for the New Millennium I (4 Credits)
First class in a three-quarter sequence for non-majors that explores the principles and science of ecology, the nature and consequences of human impacts on the environment, and the role of science in helping to formulate a policy of wise stewardship of the environment on regional and global scales. Examines the principles of ecology through readings, a lecture/discussion format, and field-oriented laboratories for hands on experience with populations, ecological communities and ecosystems. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1208 Ecology for the New Millennium II (4 Credits)
Second class in a three-quarter sequence for non-majors that explores the principles and science of ecology, the nature and consequences of human impacts on the environment, and the role of science in helping to formulate a policy of wise stewardship of the environment on regional and global scales. Examines the ecology of our own species, beginning first with the biology of human population growth and regulation, and then turning to issues of human environmental change and natural resource management with emphasis on the role of science in problem identification, evaluation and resolution. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1209 Ecology for the New Millennium III (4 Credits)
Third class in a three-quarter sequence for non-majors that explores the principles and science of ecology, the nature and consequences of human impacts on the environment, and the role of science in helping to formulate a policy of wise stewardship of the environment on regional and global scales. In-depth look at two environmental issues of global concern, climate change and declines in biodiversity. The emphasis here is to explore the science of each issue and then to consider how that knowledge might be combined with perspectives from fields of the social sciences and humanities to implement public policies that promote environmental stewardship. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1220 Molecules to Humankind I (4 Credits)
First class in a three-quarter sequence for non-majors that examines the mechanisms that sustain life. Emphasis is placed on understanding the human body at the molecular, cellular and physiological levels. In the fall quarter our discussions start with the atom and basic chemistry. We next consider the properties of complex molecules, including DNA, proteins, carbohydrates and lipids, in order to see how such molecules are used and organized by living organisms. Our discussions of large and complex molecules lead naturally to the basic unit of life, the cell. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1221 Molecules to Humankind II (4 Credits)
Second class in a three-quarter sequence for non-majors begins with an introduction to the general vertebrate body plan; we emphasize the human body plan but also compare it with other vertebrates. Discussions progress through the major organ and physiological systems of the body, including circulatory, respiratory, excretory, endocrine, nervous, skin, immune, reproductive, gastrointestinal, and skeletal and muscle systems. Discussions concentrate on the organization and function of these systems. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1222 Molecules to Humankind III (4 Credits)
Third class in a three-quarter sequence focuses for non-majors on cell biology, genetics, and human reproduction and development. After a review of cell structure and function, focusing on how cells are capable of replication with modification, the mechanisms by which information is passed on from one cell to another and from one generation to the next are considered. The second half of the quarter concerns sexual reproduction and early development. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1230 Origin & Evolution of Life I (4 Credits)
The fall quarter of this three-quarter sequence for non-majors examines evolutionary theory, as formulated by Charles Darwin in the 19th century. Two themes are central: the means by which evolution comes about and the significance of evolution for understanding the origins of biological diversity. Lectures encourage student participation and diversity of viewpoints. Goals include understanding of science as a way of knowing and the application of science inquiry to current topics in fields of human concern. Labs include field trips to explore evolutionary theory through personal observations of regional geology and natural history. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1231 Origin & Evolution of Life II (4 Credits)
During the winter quarter, the second class this three-quarter sequence for non-majors examines evolutionary theory in light of 21st-century knowledge of inheritance, including how traits are transmitted from parents to offspring and the role of DNA in shaping those traits. Other topics include the role of new molecular technologies in shaping the evolutionary future of the human species through cloning and genetic engineering. Goals follow from fall term about the nature and applications of science to areas of human concern, including the origin, diagnosis and treatment of human diseases. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.
BIOL 1232 Origin & Evolution of Life III (4 Credits)
This is the third quarter in the three-quarter sequence for non-majors that addresses current issues in evolution. It begins with a detailed analysis of "intelligent design" creationism in order to see if the most recent version of the religious challenges to evolution offers anything new. It then looks at the way in which both new discoveries in the fossil record and new molecular approaches to evolution have converged to provide "proof beyond reasonable doubt" for a key evolutionary hypothesis concerning the origin of whales. The focus then switches to the evidence for the evolution of humans and the role of gene regulatory networks in explaining the origin of novel features. The course culminates with a critical look at the role of mass extinctions in evolution and the possibilities of an anthropogenic extinction episode occurring today. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1260 Sustaining Life I (4 Credits)
A three-quarter sequence for non-majors examining some important biological mechanisms that sustain life -- and "life" in general! Emphasis is placed on the understanding the critical connections between the student's health and the health of the surrounding world. The first quarter begins with a discussion of the defining characteristics of "life" and the basic mechanisms required to sustain it. The course continues with an overview of biological diversity and ends with a focus on the many important connections between food, human health, and environmental health. The second quarter begins by building a basic understanding of how ecosystems function -- including the interactions among living organisms (including humans) and between these living organisms and their environment. The course continues with focused discussions of issues related to the impact of biological diversity on infectious disease and medicine. The third quarter begins with a focus on the importance of biodiversity to biomedical research, especially related to model systems. It then reviews some of the current threats to biodiversity and concludes by exploring some possible solutions that can give hope for sustaining "life" in the future. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1261 Sustaining Life II (4 Credits)
A three-quarter sequence for non-majors examining some important biological mechanisms that sustain life -- and "life" in general! Emphasis is placed on the understanding the critical connections between the student's health and the health of the surrounding world. The first quarter begins with a discussion of the defining characteristics of "life" and the basic mechanisms required to sustain it. The course continues with an overview of biological diversity and ends with a focus on the many important connections between food, human health, and environmental health. The second quarter begins by building a basic understanding of how ecosystems function -- including the interactions among living organisms (including humans) and between these living organisms and their environment. The course continues with focused discussions of issues related to the impact of biological diversity on infectious disease and medicine. The third quarter begins with a focus on the importance of biodiversity to biomedical research, especially related to model systems. It then reviews some of the current threats to biodiversity and concludes by exploring some possible solutions that can give hope for sustaining "life" in the future. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: BIOL 1260.

BIOL 1262 Sustaining Life III (4 Credits)
A three-quarter sequence for non-majors examining some important biological mechanisms that sustain life -- and "life" in general! Emphasis is placed on the understanding the critical connections between the student's health and the health of the surrounding world. The first quarter begins with a discussion of the defining characteristics of "life" and the basic mechanisms required to sustain it. The course continues with an overview of biological diversity and ends with a focus on the many important connections between food, human health, and environmental health. The second quarter begins by building a basic understanding of how ecosystems function -- including the interactions among living organisms (including humans) and between these living organisms and their environment. The course continues with focused discussions of issues related to the impact of biological diversity on infectious disease and medicine. The third quarter begins with a focus on the importance of biodiversity to biomedical research, especially related to model systems. It then reviews some of the current threats to biodiversity and concludes by exploring some possible solutions that can give hope for sustaining "life" in the future. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: BIOL 1261.

BIOL 1270 Living in the Microbial World I (4 Credits)
Students receive an introduction to the world of microbiology, the good, the bad and the ugly. With the help of the press and movie industry, most "human hosts" believe that microorganisms are to be feared, sterilized and/or destroyed. While this is true for a very small number of microbes, the majority is composed of essential and beneficial microorganisms that help the existence of all life on Earth. This first course in the sequence for non-majors is dedicated to raising the awareness of students to the value and need of our unseen partners. Laboratory included. Lab fee associated with this course. Honors only. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

BIOL 1271 Living in the Microbial World II (4 Credits)
For such a small size, microorganisms can have a large impact on our human world. This second course in the sequence for non-majors brings a new perspective to students on the role microorganisms, and their associated diseases, have played in turning the tide of war victories, immigration of a country, world politics and more. We tend to believe that humans alone can control their world but sometimes the mightiest of all are our unseen partners. Laboratory included. Lab fee associated with this course. Honors only. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: BIOL 1270.

BIOL 1272 Living in the Microbial World III (4 Credits)
In this last course in the sequence for non-majors, students are given an opportunity to challenge their beliefs and understandings of how life came to exist on Earth and the perspective of how humans are the most evolutionarily advanced. Students are guided through time on Earth and examine the development of life and the constant contribution of their unseen partners. Laboratory included. Lab fee associated with this course. Honors only. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: BIOL 1271.
BIOL 1990 Independent Study (1-5 Credits)
BIOL 1992 Directed Study (1-10 Credits)
BIOL 2010 General Ecology (4 Credits)
Topics in ecosystems, population and community ecology, as well as behavioral ecology. Prerequisite: BIOL 1010. Co-requisite: BIOL 2011.

BIOL 2011 General Ecology Lab (1 Credit)

BIOL 2050 Conservation Biology (4 Credits)
Biological diversity explained, including endangered species small populations, habitat fragmentation and other causes of species extinction. Also preservation and management of biological diversity. Prerequisite: BIOL 1011. Co-requisite: BIOL 2051.

BIOL 2051 Conservation Biology Lab (1 Credit)
Exercises and experimentation to compliment the lecture. Co-requisite: BIOL 2050.

BIOL 2090 Biostatistics (4 Credits)
Statistics in biological research. Computer-aided statistical analysis and hypothesis testing focusing on experiments and data unique to the biological sciences. Cross listed with BIOL 4090.

BIOL 2120 Cell Structure and Function (4 Credits)
Chemical composition of cells; structure and function of cell organelles; interrelationship of cellular unit with its environment; mechanisms of energy conversion within cells; functions of excitability, contractility and cell growth. Prerequisites: BIOL 1010, BIOL 1011 or BIOL 1220, BIOL 1221. Corequisite: BIOL 2121 lab section. CHEM 1010 prerequisite or corequisite.

BIOL 2121 Cell Structure & Function Lab (1 Credit)
Exercises and experimentation to complement lecture material. Lab fee associated with this course. Co-requisite: BIOL 2120.

BIOL 2200 Medical Terminology (3 Credits)
This course presents fundamentals and applications of medical terminology using online learning modules and assessment. This review and application of human anatomy and physiology is suitable for students who have completed introductory biology (BIOL 1010 or its equivalent) and who are working toward a career in medicine or for whom communication with health care providers is essential. Students study basic anatomy and physiology at a level that is intermediate between introductory and advanced courses, discover the medical history behind medical terminology, analyze medical case studies, and work to develop skills for clear and concise articulation of the basic concepts of anatomy and physiology behind medical diagnosis and treatment. This mastery of medical terminology helps to build a strong foundation for advanced coursework in anatomy and physiology. Prerequisite: BIOL 1010 or equivalent with instructor approval.

BIOL 2450 Human Anatomy (5 Credits)
Detailed structural analysis of the tissues, organs and organ systems of the human body. Four lectures and one 3-hour laboratory each week. Lab fee associated with this course. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 2510 General Genetics (4 Credits)
Mechanisms of heredity with application to all forms of life. One 3-hour laboratory per week. Lab fee associated with this course. Prerequisites: BIOL 1010, BIOL 1011. Recommended prerequisite: BIOL 2120. Corequisite: BIOL 2511.

BIOL 2511 General Genetics Lab (1 Credit)
The laboratory component of BIOL 2510.

BIOL 2600 Vertebrate Zoology I (4 Credits)
Evolutionary history, morphology, physiology and ecology of fish, amphibians and reptiles. Laboratory exercises focus on the structure and function of the vertebrate body, especially those of the skeletal, muscle and organ systems. Prerequisites: BIOL 1010, BIOL 1011 or permission of instructor.

BIOL 2610 Vertebrate Zoology II (4 Credits)
Evolutionary history, morphology, physiology and ecology of birds and mammals. Laboratory exercises focus on the structure and function of the vertebrate body, especially those of the skeletal, muscle and organ systems. Prerequisites: BIOL 1010, BIOL 1011 or permission of instructor.

BIOL 2992 Directed Study (1-10 Credits)

BIOL 3010 Evolution and Speciation (4 Credits)
Theories and supporting evidence explaining evolution from origin of universe to complex interrelationships of species. Prerequisites: BIOL 1010, BIOL 1011 and BIOL 2510.

BIOL 3020 Aquatic Ecology (4 Credits)
An introduction to the ecology of fresh-water and marine organisms including aquatic adaptations, community organization, food chains, nutrient cycling and man's impact on aquatic ecosystems. Prerequisite: BIOL 2010 or instructor's permission.
BIOL 3025 Science and the Law (2,4 Credits)
In its broadest definition, forensic science represents a fusion of the natural sciences, criminology, and jurisprudence. The field of forensic pathology in particular focuses on the investigation of sudden, unnatural, unexplained or violent deaths. Using the most authoritative books available and a multimedia lecture format, students in this course will gain an introductory understanding of the pathophysiology or wounding and death as well as the clinical antemortem symptomology of physical abuse, neglect and extrajudicial wounding. Students will also learn about the processes responsible for the decomposition of corpses as well as the use of molecular and geometric tools for the reconstruction of crime scenes from bloodstain evidence. Finally, students will learn how to integrate a variety of forensic tools in investigation of sexual assault, serial killers, traffic fatalities and mass deaths. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 3030 Alpine Ecology (4 Credits)
Ecology of alpine and subalpine regions of Colorado; organization and distribution of communities and populations, succession, energy flow, nutrient cycling, population adaptations in life-history physiology, behavior and morphology. Prerequisite: BIOL 2010.

BIOL 3035 Invasive Species Ecology (4 Credits)
This course investigates those plants and animal species that have dramatically expanded their ranges and cause ecological harm. Topics covered include the mechanisms of ecological impacts across the globe, how invasive species are used to test basic ecological theory, the application of this research for managing real species, and related issues such as the debate within the scientific community about the term “invasive.” We use a case-study approach, and students have the opportunity to go into the field as a class to observe the real invasions and learn sampling methods.

BIOL 3044 Coral Reef Ecology (3 Credits)
Ecology of coral reefs; organization and distribution of reefs; review of reef organisms and their interactions with each other and their physical environment; threats to coral reef conservation. Prerequisite: BIOL 2010 or BIOL 2050.

BIOL 3045 Coral Reef Ecology Lab (1 Credit)
Ecology of coral reefs laboratory to supplement lecture material; travel to the Caribbean over spring break to observe coral reefs firsthand; introduction to research methods. Prerequisite: SCUBA certification and permission of instructor.

BIOL 3055 Ecology of the Rockies (4 Credits)
A week in residence at the Mt. Evans Field Station prior to the start of fall quarter includes field projects dealing with ecology and environmental issues. On campus classes involve data analysis and interpretation and formal scientific communication. Themes include terrestrial and aquatic ecosystems, taxonomic groups ranging from conifer stands to aquatic insects and mountain goats. Lab fee associated with this course. Prerequisite: BIOL 2010 or permission of instructor.

BIOL 3060 Tropical Ecology (3 Credits)
Biological composition of tropical ecosystems; biodiversity, biogeochemistry; causes and biological consequences of tropical deforestation; ecologically based approaches toward sustainable tropical forest use. Includes laboratory. Prerequisite: BIOL 2010.

BIOL 3070 Ecological Field Methods (4 Credits)
Series of field exercises for students to learn principles and procedures of field methodology, data analysis and technical writing in ecology; problems drawn from population, community and ecosystem ecology. Lab fee associated with this course. Prerequisite: BIOL 2010.

BIOL 3085 Insect Ecology (4 Credits)
A general introduction to insect biology and the science of entomology. Arthropods are the most diverse group of animals on Earth and insects account for more than half of all known living organisms. This course explores the biodiversity of insects on Earth, insect morphology and physiology. The evolutionary history and taxonomy of key orders of insects is emphasized as well as the importance of insects to our everyday lives. Prerequisites: BIOL 1010 and BIOL 1011.

BIOL 3090 Microbial Ecology (4 Credits)
Interactions among microorganisms and their environment. Impact of ecological principles on microbial diseases, pollutant degradation, nutrient cycles and global change. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 3095 Global Change Ecology (4 Credits)
Over the past century, the mean surface temperature of our planet has increased slightly less than 1°C. While this may seem like a small increment, this change is already profoundly affecting Earth’s organisms and ecological communities, and predications for the impacts of continued change range from severe to catastrophic. Humans are also changing the environment through alteration of nutrient and water regimes. Topics include cause of climate change, comparison to past climatic change, human contribution to change and effect on organisms, communities and ecosystems. Prerequisites: BIOL 1010 and BIOL 1011.

BIOL 3100 Histology: Medical Microanatomy (4 Credits)
Microscopic organization of tissues and organs; correlation of organization of organs with functions and pathologies; emphasis on mammalian systems. Includes laboratory. Lab fee associated with this course. Prerequisite: BIOL 2120.

BIOL 3110 Special Topics: Biology (1-5 Credits)
Topics of special interest to teaching/research faculty of department presented as needed to complement and expand existing curriculum. May be repeated for credit.

BIOL 3120 General Microbiology (4 Credits)
Fundamental principles of microorganisms in the world and in disease; role of bacteria in biological phenomena. Includes laboratory. Lab fee associated with this course. Prerequisite: BIOL 2120.
BIOL 3130 Molecular Evolution (4 Credits)
Evolution of macromolecules and reconstruction of evolutionary history of genes and organisms. Prerequisite: BIOL 2510.

BIOL 3135 Topics in Cell Motility (4 Credits)
Fibrous elements of the cytoskeleton and associated proteins and their role in cellular motility is examined in detail. The physical forces involved in cellular motile function is applied in understanding cellular motile behavior. Prerequisite: BIOL 2120.

BIOL 3145 Cellular and Molecular Biology of Cancer (2-4 Credits)
This course examines the mechanisms that underlie the development and progression of cancer. The cellular and molecular events that drive uncontrolled cell proliferation and eventual metastasis of tumors are discussed. Prerequisite: BIOL 2120.

BIOL 3150 Intracellular Dynamics (4 Credits)
Focuses on spatial and temporal control of intracellular processes with an emphasis on neuronal and endocrine cells. Topics include vesicular traffic, protein targeting, dynamics and spatial organization of signaling complexes. Emphasis on modern techniques of cell and molecular biology with examples from primary literature. Prerequisite: BIOL 2120.

BIOL 3160 Biophysics: Ion Channels & Disease (4 Credits)
Examines ion channel structure and function and the ways in which this information provides insight into human disease. The focus is on the use of biophysical techniques in combination with molecular and genetic analysis of channel genes. General Physics recommended. Prerequisite: BIOL 2120.

BIOL 3200 Invertebrate Evolution (4 Credits)
Introduction to remarkable diversity of invertebrate life, both in terms of numbers of species, novel body plan and physiological adaptations. Includes laboratory. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 3230 Nutrition (3 Credits)
Investigation of metabolism, all nutrients and various applications of nutrition to sports and healthy living. Prerequisite: BIOL 3250.

BIOL 3250 Human Physiology (5 Credits)
Functional relationships of human organ systems with coordinated laboratory activities and experiments that demonstrate and test physiological principles. Lab fee associated with this course. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 3260 Nutrition (3 Credits)
From physiological and biochemical perspectives, this course explores the relationships of energy metabolism, nutrients, vitamins and minerals to human health. Prerequisite: BIOL 3250.

BIOL 3300 Biodiversity-Flowering Plants (4 Credits)
Basic techniques and principles of systematics with application to the origin, evolution, radiation, classification and biodiversity of flowering plants (angiosperms). Lab fee associated with this course. Prerequisites: BIOL 1010, BIOL 1011 or GEOG 1201, GEOG 1202, GEOG 1203 or instructor's permission.

BIOL 3400 Ornithology (4 Credits)
Biology of birds with emphasis on ecology and behavior; field and laboratory work to stress bird identification and ecological relationships of birds. Lab fee associated with this course. Prerequisites: BIOL 1010, BIOL 1011.

BIOL 3410 Animal Behavior (4 Credits)
This class examines animal behavior from an evolutionary and ecological perspective. The course provides the background needed to understand behavioral evolution, including a focus on the inheritance of behavior, natural selection, sexual selection, and kin selection. This class studies the evolution of a variety of behaviors, including communication and displays, mate choice, parental care, cooperation, mating systems, social behavior, habitat selection, foraging, and anti-predator behavior. The emphasis is on theoretical principles, design of experiments, and interpretation of data. Prerequisites: BIOL 1010 and BIOL 1011.

BIOL 3560 Molecular Biology Laboratory (4 Credits)
Laboratory based course that covers techniques in gene excision, cloning and reinsertion and gene sequencing. Lab fee associated with this course. Prerequisite: BIOL 2510.

BIOL 3570 Proteins in Biological Systems (3 Credits)
Proteins considered in their biological setting; protein synthesis and degradation; survey of protein functions in vivo; evolution of proteins; introduction to protein biotechnology. Prerequisites: BIOL 2120, CHEM 2451, CHEM 2452 and CHEM 2453.

BIOL 3610 Developmental Biology (4 Credits)
Processes and mechanisms of development, exemplified by higher animal embryogenesis, with consideration of microbial model systems. Prerequisite: BIOL 2510.

BIOL 3620 Vertebrate Embryology (4 Credits)
Development processes in placental mammals; analysis of vertebrate cyto-differentiation and morphogenesis. Laboratory on embryonic anatomy of amphibians, birds and mammals. Prerequisites: BIOL 1010, BIOL 1011 and BIOL 2120.

BIOL 3630 Cell Biology of Development (4 Credits)
Every organism has a stereotypical shape, but how does this shape arise? This course examines the cellular and molecular mechanisms that direct the forming of body and tissue shape. Prerequisite: BIOL 2120.
BIOL 3640 Introductory Neurobiology (4 Credits)
Organization and function of vertebrate central nervous system; nature of action potential, biochemistry of neurotransmitters, neuropeptides, functional anatomy of nervous system, phylogeny of nervous system. Prerequisite: BIOL 2120.

BIOL 3641 Systems Neuroscience (4 Credits)
Structure and function of the brain and spinal cord, emphasis on functional systems including sensory perception, motor control and consciousness. Prerequisite: BIOL 3640.

BIOL 3642 Neuropharmacology (4 Credits)
How psychoactive drugs exert their effects on the nervous system; drugs of abuse and drugs used in the treatment of psychotic and neurodegenerative disorders. Prerequisite: BIOL 2120.

BIOL 3643 Developmental Neurobiology (4 Credits)
This course investigates the mechanisms involved in the maturation of neurons, and signals that direct neurons to their proper position in the central nervous system. Prerequisite: BIOL 3640.

BIOL 3644 Neuromuscular Pathophysiology (4 Credits)
Cellular and molecular basis for normal nerve and muscle functions and the alteration of these functions by toxins, trauma and diseases of the brain, nerves and muscles; how specific insults produce clinical symptoms and pathology. Prerequisite: BIOL 2120. Recommended Prerequisite: BIOL 3640 or BIOL 3250.

BIOL 3646 Seminar: Cognitive Neuroscience (2 Credits)
This seminar is the capstone course for the neuroscience portion of the cognitive neuroscience program. Seminar topics include but are not limited to neurological disorders, model systems in neuroscience and sensory systems.

BIOL 3650 Endocrinology (4 Credits)
Mechanisms of hormone action, evolution of vertebrate endocrine systems, analysis of function integration of hormonal responses in maintenance of homeostasis. Prerequisite: BIOL 2120.

BIOL 3655 Molecular Neuroendocrinology (4 Credits)
Advanced laboratory course that uses anatomical/immunological, biochemical and molecular approaches to analyze neuroendocrine pathways in the hypothalamus/pituitary system. Lab fee associated with this course. Prerequisites: BIOL 3650 and instructor's permission.

BIOL 3670 Molecular Immunology (4 Credits)
Organs, cells and molecules that underlie mammalian immune response; relationship of immune system to disease. Prerequisite: BIOL 2510.

BIOL 3680 Advanced Techniques in Cell Biology (4 Credits)
Advanced laboratory course that covers current techniques used in cell biology research. Lab fee associated with this course. Prerequisite: BIOL 2120.

BIOL 3700 Topics in Ecology (1-4 Credits)
Topics vary; may include plant, animal, biochemical, alpine or aquatic; one topic per quarter. May be repeated for credit. Taught from original literature. Prerequisite: one quarter of undergraduate ecology and/or instructor's permission.

BIOL 3701 Topics in Genetics (1-4 Credits)
Topics vary; may include genetic methods, molecular genetics, human genetics, chromosomes or population genetics; one topic per quarter. May be repeated for credit. Taught from original literature. Prerequisite: BIOL 2510 and/or instructor's permission.

BIOL 3702 Advanced Topics in Regulatory Biology (1-4 Credits)
Topics vary; may include endocrinology, physiology or immunology; one topic per quarter. May be repeated for credit. Taught from original literature. Prerequisite: varies with topic and instructor; instructor's permission usually required.

BIOL 3703 Advanced Topics in Developmental Biology (1-4 Credits)
Topics vary; may include gene expression in development, developmental immunogenetics, developmental biochemistry or aging; one topic per quarter. May be repeated for credit. Taught from original literature. Prerequisite: instructor's permission.

BIOL 3704 Advanced Topics in Cell Biology (1-4 Credits)
Topics vary; may include supramolecular structure, microscopy, membranes and techniques. May be repeated for credit. Taught from original literature. Prerequisite: varies with course and instructor; instructor's permission usually required.

BIOL 3705 Advanced Topics in Molecular Biology (1-4 Credits)
Topics vary, but may include biochemistry, supramolecular structure and function, molecular genetics, membrane biology. May be taken more than once for credit. Taught from original literature. Prerequisite: varies with course and instructor; instructor's permission usually required.

BIOL 3706 Topics in Evolution (1-4 Credits)
Topics vary, but may include molecular evolution, plant evolution and animal evolution. Prerequisite: instructor's permission.

BIOL 3707 Advanced Topics in Conservation Biology (1-4 Credits)

BIOL 3800 Human Molecular Biology (4 Credits)
Molecular basis of heredity and genetic control, using in-vitro systems and microbial and eukaryotic models; molecular basis of heredity and genetic regulation considering in-vitro systems as well as prokaryotic and eukaryotic models. Prerequisite: BIOL 2510.
BIOL 3870 Medical Ethics (4 Credits)
This course presents knowledge and discussion of ethical issues that arise from advances in the biomedical sciences and medicine. Several specific ethical issues and policies related to methodologies and procedures, emerging medical technologies, treatment decisions, doctor-patient relationship, informed consent, medical experimentation / clinical research, and health care reform. Prerequisites: BIOL 1010, BIOL 1011, and BIOL 2010 or instructor approval.

BIOL 3910 Viruses & Infectious Human Diseases (4 Credits)
Organization of viruses at the molecular level with consideration of diseases that these agents cause in humans. The mechanism of action of viruses is a major theme of the course. Prerequisite: BIOL 2510. Recommended prerequisite: BIOL 3800.

BIOL 3920 Forensic Pathology (2-4 Credits)
In its broadest definition, forensic science represents a fusion of the natural sciences, criminology and jurisprudence. The field of forensic pathology in particular focuses on the investigation of sudden, unnatural, unexplained or violent deaths. Using the most authoritative books available and a multimedia lecture format, students in this course gain an introductory understanding of the pathophysiology of wounding and death as well as the clinical antemortem symptomology of physical abuse, neglect and extrajudicial wounding. Students also learn about the processes responsible for the decomposition of corpses as well as the use of molecular and geometric tools for the reconstruction of crime scenes from bloodstain evidence. Finally, students learn how to integrate a variety of forensic tools in investigations of sexual assault, serial killers, traffic fatalities and mass deaths. Prerequisite: BIOL 2120 or permission of instructor.

BIOL 3950 Undergraduate Research (1-10 Credits)
Participation in faculty research programs by agreement between student and faculty member. Maximum of 5 quarter hours of BIOL 3950 and/or BIOL 3991 may be applied to the 45-quarter-hour requirement for a major in biological sciences.

BIOL 3991 Independent Study (1-10 Credits)
Topic in biology studied under faculty supervision. Student's responsibility to identify faculty supervisor before registering for class. Maximum of 5 quarter hours of BIOL 3991 and/or BIOL 3950 may be applied toward the 45-quarter-hour requirement for a major in biological sciences.

BIOL 3992 Directed Study (1-10 Credits)

Business Administration

The program in general business prepares students for a career in which both a broad background and general knowledge in the field of business are required. This four-year program enables students to acquire a solid background in management with complementary study in accounting, marketing, finance, statistics, business law and entrepreneurship. Through this major, students are prepared to start their own businesses. They also are qualified to enter various areas of business or industry, or to pursue careers with local, state or federal governments. Students in general business are also positioned to enter specialized graduate programs, including law. Students majoring in general business are advised by the faculty in the Department of Management and the Daniels College of Business advising team located in Margery Reed Hall.

Business Administration

Through the business administration minor is open to non-business majors only. Students complete course work in business law, accounting, finance, management and marketing.

Requirements for the Minor

24 credits, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1000</td>
<td>Gateway to Business</td>
<td>4</td>
</tr>
<tr>
<td>LGST 2000</td>
<td>Foundations of Business Law</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 2010</td>
<td>Survey of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 2800</td>
<td>Introduction to Marketing</td>
<td>4</td>
</tr>
<tr>
<td>FIN 2010</td>
<td>Survey in Finance</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 3010</td>
<td>Developing a Business Plan</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Courses

BUS 1000 Gateway to Business (4 Credits)
Practical glimpse into the global and competitive nature of business. From product ideation to product development, this course introduces students to business's role in society in promoting sustainability as the only successful business model for delivering value to customers and stakeholders of all kinds. Key business activities such as marketing, finance and accounting, working in team, and product/service innovation and creativity are introduced. No prerequisites.
BUS 1999 Daniels College of Business Checkpoint 1 Assessment (0 Credits)
Daniels College of Business graduation requirements include separate assessment exams to show mastery and retention of course content within the business core. The assessment should be taken immediately after completing all of the business core courses associated with Daniels Checkpoint 1. Students must pass both assessment exams before registering for MGMT 2850.

BUS 2999 Daniels College of Business Checkpoint 2 Assessment (0 Credits)
Daniels College of Business graduation requirements include separate assessment exams to show mastery and retention of course content within the business core. This assessment should be taken immediately after completing all of the business core courses associated with Daniels Checkpoint 2. Students must pass both assessment exams before registering for MGMT 2850.

BUS 3500 Business Communications I (1 Credit)
The course focuses on providing students appropriate business communication and presentation skills related to interviewing, networking and business presentations. Prerequisite: degree checkpoint 2.

BUS 3700 Topics in Business (1-10 Credits)

BUS 3980 Internship (0-4 Credits)
Initial for-credit internship experience for students pursuing a business major, creating the opportunity to acquire meaningful work experience in a supervised, practical setting. Prerequisite: BUS 1000.

Department of Business Information and Analytics

Office: Daniels College of Business, Suite 580
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303.871.3695
Email: Deborah.Walbridge@du.edu
Web Site: http://daniels.du.edu/faculty-research/business-information-analytics/

Analytics is a challenging and exciting field that helps people make important informed decisions based on quantitative information. Business analysts make extensive use of data modeling, statistical techniques, and scenarios to manipulate data to find meaning, explain causation, and make predictions.

Currently, massive amounts of structured and unstructured data are collected and stored by computers as a result of business and society’s greater dependence on information technologies and software applications to transact business and every-day life. As such, data analytics skills are highly portable and becoming a frequently sought competency in workers. Analytics is a valuable partner to almost any field of study, including engineering, agriculture, social science, medical science, environmental science, forestry, marketing, accounting, and finance.

Business Analytics

Bachelor of Science in Business Administration Major Requirements
(185 credits required for the degree) (p. 43)

Minimum of 44 credits; maximum of 45 credits. Requirements include:

INFO 3100 Automating Business Processes 4
INFO 3140 Foundations of Information Management 4
INFO 3200 Business Forecasting and Visualization 4
INFO 3240 Enterprise Information Management 4
INFO 3300 Data Warehousing and Data Mining 4
INFO 3340 Project Management and Simulation 4
INFO 3400 Complex Data Analytics 4
INFO 3440 Optimization Modeling 4
INFO 3500 Capstone/Senior Project 4
Electives 8
Select eight credits of INFO coursework

Total Credits 44

Minor Requirements
The Business Analytics minor is available to all traditional DU undergraduate students.

24 credits, including:

INFO 1010 Analytics I: Data Management and Analysis 4
INFO 1020 Analytics II: Business Statistics and Analysis 1 4
INFO 3100 Automating Business Processes 4
INFO 3140 Foundations of Information Management 4

Electives 8
Select eight credits of INFO coursework

Total Credits 24

1 BSBA and BSAcc students take INFO 1010 and INFO 2020 as part of the business core.

**Information Technology**

**Minor Requirements**

The Information Technology minor is available only to students pursuing a major in the Daniels College of Business.

Minimum 20 credits. Requirements include:

INFO 3100 Automating Business Processes 4
INFO 3140 Foundations of Information Management 4
INFO 3240 Enterprise Information Management 4
INFO 3300 Data Warehousing and Data Mining 4
INFO 3991 Independent Study (OR approved elective) 4

Total Credits 20

1 INFO 1010 Analytics I: Data Management and Analysis is a pre-requisite to beginning the minor. Students take this course as part of the business core.

**Statistics**

The Statistics minor is available to all traditional DU undergraduate students.

**Minor Requirements**

Minimum 20 credits. Requirements include:

INFO 1010 Analytics I: Data Management and Analysis 1 4
INFO 1020 Analytics II: Business Statistics and Analysis 1 4

Select three of the following courses: 12
INFO 2020 Analytics III: Business Modeling and Analysis
INFO 3100 Automating Business Processes
INFO 3200 Business Forecasting and Visualization
INFO 3340 Project Management and Simulation
INFO 3400 Complex Data Analytics
INFO 3440 Optimization Modeling
INFO 3700 Topics in Business Analytics

Total Credits 20

1 BSBA and BSAcc students take INFO 1010 and INFO 2020 as part of the business core.

**Business InformationAnalytics Courses**

INFO 1010 Analytics I: Data Management and Analysis (4 Credits)
The amount of data businesses are able to maintain and process is growing exponentially, and the ability to manage that data successfully can give a business a tremendous competitive advantage. This course introduces the student to the business data landscape, as well as basic data management and analysis skills through spreadsheet and database applications. Student projects focus on data collection, data cleansing and mining, statistical and graphical analysis, basic modeling, and written presentation skills. No prerequisites.

INFO 1011 Microsoft Office Certification I Lab (0 Credits)
Learning lab and exam with successful completion resulting in award of formal Microsoft Office certification for Excel. BSBA/BSACC degrees only. Prerequisites:INFO 1010.
INFO 1020 Analytics II: Business Statistics and Analysis (4 Credits)
Businesses can never have perfect information; therefore, they must employ statistical techniques to improve the decision-making process. This course introduces students to the basic tenets of probability and statistics, with an emphasis on business applications. Statistical models as decision-support tools are taught. Student projects focus on data collection, data analysis, decision analysis, and written presentation skills. Prerequisites: INFO 1010, MATH 1200, or MATH 1951 and MOS Excel certification.

INFO 1021 Microsoft Office Certification II Lab (0 Credits)
Learning lab and exam with successful completion resulting in award of formal Microsoft Office certification for Word and PowerPoint. BSBA/BSACC degrees only. Prerequisites: MATH 1200 or MATH 1951 and STAT 1400 or INFO 1020.

INFO 2020 Analytics III: Business Modeling and Analysis (4 Credits)
Businesses make decisions and improve processes using a variety of modeling and analytic techniques. This course introduces the student to the techniques of multiple regression analysis, time series analysis, optimization, and simulation for solving a variety of business problems. Applications include economic forecasting, supply chain management, and project management. Student projects focus on using spreadsheet modeling for problem solving, and emphasizes written and oral presentation techniques. Prerequisites: INFO 1020, degree checkpoint 1 and all MOS certifications.

INFO 3100 Automating Business Processes (4 Credits)
This course focuses on using Microsoft Excel to support decision making for managers. This course covers advanced Excel functions and menu options along with basic spreadsheet modeling design and good practices. It also covers automating tasks in Excel using VBA and creating Excel Add-in programs. We finish the class by covering object oriented programming such as Visual Basic. Prerequisite: INFO 1020 and DCB checkpoint 2.

INFO 3140 Foundations of Information Management (4 Credits)
This course introduces the student to database management systems. Specifically, this course focuses on database theory, appropriate database design, modeling tools, and the practical issues of implementation and management. This course consists of four primary components (or modules): (1) database theory, (2) database design tools and techniques (ERD's), (3) Structured Query Language (SQL), and (4) applying database concepts (using Microsoft Access). Corequisite: INFO 3100. Prerequisite: INFO 1020.

INFO 3200 Business Forecasting and Visualization (4 Credits)
This course explores the concepts of business forecasting and visualizations of business data. It covers the concepts of forecasting and visualization terminology along with all the steps of the forecasting process: define goal, get data, explore & visualize series, pre-process data, partition the data series, apply forecasting method(s), evaluation and compare performance, implement the forecasts/system, and communicate the results. This course also covers the creation and interpretation of real-time business data in terms of dashboards and scorecards. Prerequisite: INFO 2020 and DCB checkpoint 2.

INFO 3240 Enterprise Information Management (4 Credits)
This is the second in the series of two courses designed to expose students to database management systems. This course focuses on advanced topics in database theory, SQL, and an introduction to an enterprise database system using Microsoft SQL server and an integrated development environment using Visual Studio. Prerequisite: INFO 3140.

INFO 3300 Data Warehousing and Data Mining (4 Credits)
Data warehouse components and construction, extraction, transforming, and loading (ETL) and data cleansing, predictive analytics (trees, neural networks), descriptive analytics (drillable/OLAP reports, published reports, SQL queries), cluster and association modeling. Prerequisite: INFO 3240.

INFO 3340 Project Management and Simulation (4 Credits)
Students examine the science, practice the art, and discuss the folklore of project management to enable them to contribute to and manage projects as well as to judge when to apply this discipline. They explore the critical chain approach and probability distributions versus point estimates. Monte Carlo simulation modeling is also covered to explore the benefits and limitations of simulation as a tool for solving business problems, and to present students with the opportunity to build, analyze, and report on Monte Carlo simulations. Prerequisite: INFO 2020 abd DCB checkpoint 2.

INFO 3400 Complex Data Analytics (4 Credits)
This course explores the concepts of the considerations and management of big data projects. It also explores technical aspects of performing text analytics and natural language processing, network analysis, and geographic data analysis. We focus on social data for many of the examples and also explore how disparate data sources can be combined to provide insight for business decisions. Prerequisite: INFO 3300.

INFO 3440 Optimization Modeling (4 Credits)
This course introduces concepts and techniques for the modeling and solution of business decision problems. It gives broad coverage to the formulation of optimization models and the use of commercially available software tools for solving them. These models include topics such as linear programming, integer programming, the transportation and assignment problems, network optimization models and non-linear programming. Emphasis is placed on the process of analyzing business scenarios, formulating models in spreadsheet software, and presenting oral and written project reports. Prerequisite: INFO 2020 and DCB checkpoint 2.

INFO 3477 Database-Driven Websites (4 Credits)
The programming course provides an in-depth look at the main techniques surrounding the development of dynamic web applications. This intensive lab/lecture course offers a detailed look at building a database-driven website. Databases are not new, but designing and applying them in a web environment presents new challenges, as well as new opportunities for data exploration. Students conceive, build and deploy a website using a database as its core. Topics include: creating database-geared pages with HTML, CSS, and ASP; using SQL combined with modeling languages to build web database schemas, and interfacing the website via VBScript (or JavaScript) and ADO. Prerequisite: INFO 3140.
INFO 3500 Capstone/Senior Project (4 Credits)
This course gives the student an opportunity to apply the knowledge and skills learned in this program to a real-world problem submitted by a partner business. Students take a business problem from problem definition, data collection, and model construction, through analysis and presentation of results to recommendations for specific business decisions. Prerequisite: INFO 3340.

INFO 3700 Topics in Business Analytics (4 Credits)
Exploration of various topics and issues related to timely analytics applications. Prerequisites: DCB checkpoint 2.

INFO 3980 Internship (4 Credits)
Internship; requires written report.

INFO 3991 Independent Study (4 Credits)
Independent research/study; requires written report.

Info Tech E-Commerce Courses

ITEC 3155 Introduction to Database Applications in Accounting (4 Credits)
Introduces database technology and appropriate Accounting Information Systems to design, create, debug, and operate a simple/intermediate accounting application using the Microsoft Access Database. Prerequisite: degree checkpoint 2. Course is cross-listed with ITEC 4155, ACTG 4155.

ITEC 3325 Emerging Technologies (4 Credits)
This course is for students who want a strategic edge: to understand how the advanced information technologies that are emerging today will impact business in the near to medium future. This course will equip students with an understanding of the key information technologies central to the knowledge economy, their current and prospective business uses, and lifelong skills in how to think about business uses of these technologies - to identify, critically analyze, and evaluate them. This course is for students who want to become key players in the coming economy by combining substantial understanding of the technology side with substantial understanding of the business side – applications and strategy. Prerequisites: Degree checkpoint 2.

ITEC 3377 Introduction to Business Intelligence (4 Credits)
Corporate decision making and tools that support this process, including database theory, database design, the decision process, data warehousing fundamentals, data mining, decision support systems (DSS), decision support and data warehousing tools, the impact of e-business and e-commerce, and DSS in support of customer relationship management (CRM). This course will consider the practical issues of analysis, selection, implementation and management of these systems, and will incorporate a hands-on component using current data warehousing tools and technology. Prerequisite: ITEC 3485 and degree checkpoint 2.

ITEC 3378 Data Warehouse & Managing Enterprise Data (4 Credits)
This course is focused on the process of creating a data warehouse. The process includes requirements definition, design, modeling, establishing an architecture, integration, data conversion, data cleansing, and ETL (Extraction, Transformation, and Loading). Cross listed with ITEC 4378. Prerequisites: ITEC 3377 and degree checkpoint 2.

ITEC 3379 Data Warehouse and Business Intelligence III (4 Credits)
This course is focused on the process of corporate decision making and the tools that support this process. Early DSSs in support of customer relationship management have made strides in focusing on the support of the strategic decision making process. Through business intelligence tools, this process is becoming a science in itself. This course focuses on this emerging science. Prerequisites: ITEC 3378 and degree checkpoint 2.

ITEC 3380 Data Warehouse and Business Intelligence IV (4 Credits)
This course is focused on the overall process of creating a data warehouse from requirements through implementation. The format is that of a Practicum course designed to have each student build a small data warehouse or to build a component of a larger data warehouse in conjunction with a group. Prerequisites: ITEC 3379 and degree checkpoint 2.

ITEC 3410 Information System Analysis (4 Credits)
Current theory and approaches to information systems analysis, focusing on the development of requirements from the perspective of classes and objects found in the vocabulary of any domain. Prerequisites: ITEC 3540, ITEC 3475 and degree checkpoint 2.

ITEC 3420 Information System Design (4 Credits)
Design methods that encompass the process of information system design decomposition and a notation for depicting both logical and physical as well as static and dynamic models of the information system under design. Prerequisites: ITEC 3410 and degree checkpoint 2.

ITEC 3700 Topics in Information Technology and E-Commerce (1-4 Credits)
Topics vary each term. View the Schedule of Classes for specific information on topics.

ITEC 3810 Networks & Telecommunication (4 Credits)
Examination of network-enabling technologies and concepts, including LANs and WANs. Network design management and trouble-shooting issues are covered. Network design in the age of the Internet is emphasized, including intranets, extranets, design issues, security and firewalls. Pros and cons of private networks, including virtual private networks and discussed. Alternative technologies such as wire line, wireless, satellite and cable are covered. Cross listed with ITEC 4320. Prerequisites: Degree checkpoint 2.

ITEC 3840 Practicum (1-4 Credits)
Faculty supervised work experience. Instructor approval required.
ITEC 3980 Internship (1-5 Credits)
Practical experience (field study); requires written report. Instructor approval required.

ITEC 3991 Independent Study (1-8 Credits)
Independent research/study; requires written report. Instructor approval required.

ITEC 3992 Directed Study (1-4 Credits)

Statistics Courses

Department of Chemistry and Biochemistry

Office: F. W. Olin Hall, Room 202
Mail Code: 2190 E. Iliff Ave. Denver, CO 80208
Phone: 303-871-2436
Email: cheminfo@du.edu
Web Site: http://www.chemistry.du.edu

The Department of Chemistry and Biochemistry offers a program of study that combines a traditional classroom emphasis with an innovative laboratory experience. In addition to providing excellent training for graduate study in chemistry and biochemistry, the program serves as a means to earning a strong pre-professional degree. A degree in chemistry, biochemistry or environmental chemistry prepares students for a variety of careers in chemical and biochemical research, medicine, life sciences, environmental science, atmospheric sciences, materials science, oceanography and teaching in chemistry or science in general. It also prepares students for employment with chemical, pharmaceutical, biotechnology, medical products, natural resources and environmental companies.

Because most medical and dental schools require a minimum of two years of chemistry for admission, a major in chemistry or biochemistry provides an excellent background for premed or pre-dental majors. Students who complete the bachelor of science in chemistry curriculum are certified by the American Chemical Society.

Chemistry

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)

Minimum of 40 credits of chemistry. Requirements include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
<td></td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2131</td>
<td>Chemistry of the Elements</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2141</td>
<td>and Chemistry of the Elements Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3210</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3500</td>
<td>Chemistry Frontiers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM at 3000 level or higher</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits 40

1 A maximum of three credits of CHEM 3995 Research in Chemistry can count toward the six credits of electives.

Additional Requirements

Calculus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>
or MATH 1962 Honors Calculus II
MATH 1953 Calculus III
or MATH 1963 Honors Calculus III

**Physics**
One year, preferably:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213</td>
<td>University Physics III</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Credits** 27

**Bachelor of Art Minor Requirements**

20 credits of chemistry. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM at the 2000 level or higher ¹</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

**Total Credits** 20

¹ Highly recommended courses are CHEM 2453/CHEM 2463, CHEM 2011/CHEM 2041.

**Bachelor of Science Major Requirements**

(183 credits required for the degree) (p. 40)

Minimum of 45 credits in chemistry. Requirements include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
<td></td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2131</td>
<td>Chemistry of the Elements</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2141</td>
<td>and Chemistry of the Elements Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 3210</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3620</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3621</td>
<td>Physical Chemistry III</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3500</td>
<td>Chemistry Frontiers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM at the 3000 level or higher</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Credits** 45

**Additional Requirements**

Calculus

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>
or MATH 1963  Honors Calculus III

Physics

One year, preferably:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213</td>
<td>University Physics III</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Credits** 27

### Bachelor of Science Minor Requirements

20 credits of chemistry. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM at the 2000 level or higher</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 20

1. Highly recommended courses are CHEM 2453/CHEM 2463, CHEM 2011/CHEM 2041.

### Bachelor of Science in Chemistry Major Requirements

(183 credits required for the degree) (p. 46)

Minimum of 60 credits in chemistry. Requirements include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
<td></td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2131</td>
<td>Chemistry of the Elements</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2141</td>
<td>and Chemistry of the Elements Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 3210</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3620</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3621</td>
<td>Physical Chemistry III</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3811</td>
<td>Biochemistry-Proteins</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3820</td>
<td>Biochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3500</td>
<td>Chemistry Frontiers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3995</td>
<td>Research in Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM at the 3000 level</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

**Total Credits** 60

1. Written report required

### Additional Requirements

**Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
</tbody>
</table>

Math or Computer Science Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Physics

One year, preferably:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213</td>
<td>University Physics III</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Credits

|            |                                  | 35      |

Biochemistry

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

Minimum of 46 credits in chemistry. Requirements include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
<td></td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2131</td>
<td>Chemistry of the Elements</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2141</td>
<td>and Chemistry of the Elements Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 3210</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3811</td>
<td>Biochemistry-Proteins</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3812</td>
<td>Biochemistry-Membranes/Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3813</td>
<td>Biochemistry-Nucleic Acids</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3820</td>
<td>Biochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3000-level CHEM course</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits

|            |                                  | 46      |

1 CHEM 3995 Research in Chemistry may be substituted with prior approval.

Additional Requirements

Biology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2510</td>
<td>General Genetics</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2511</td>
<td>and General Genetics Lab</td>
<td></td>
</tr>
</tbody>
</table>

Upper-division biology class

|            |                                  | 5       |

Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>
Bachelor of Science in Chemistry with Biochemistry Concentration Requirements

(183 credits required for the degree) (p. 46)

Minimum of 60 credits in chemistry. Requirements include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2452</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2462</td>
<td>and Organic Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>Organic Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2463</td>
<td>and Organic Chemistry Lab III</td>
<td></td>
</tr>
<tr>
<td>CHEM 2011</td>
<td>Analysis Equilibrium Systems</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2041</td>
<td>and Analysis Equilibrium Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2131</td>
<td>Chemistry of the Elements</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2141</td>
<td>and Chemistry of the Elements Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 3210</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3620</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3621</td>
<td>Physical Chemistry III</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3811</td>
<td>Biochemistry-Proteins</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3812</td>
<td>Biochemistry-Membranes/Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3820</td>
<td>Biochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3813</td>
<td>Biochemistry-Nucleic Acids</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3500</td>
<td>Chemistry Frontiers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3995</td>
<td>Research in Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM at the 3000 level</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits 60

1 Written report required

Additional Requirements

Biology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2121</td>
<td>and Cell Structure &amp; Function Lab</td>
<td></td>
</tr>
<tr>
<td>Biology Elective</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
Calculus
MATH 1951  Calculus I  4
MATH 1952  Calculus II  4
or MATH 1962  Honors Calculus II  
MATH 1953  Calculus III  4
or MATH 1963  Honors Calculus III  
Math or Computer Science Electives  8

Physics
One year, preferably:
PHYS 1211  University Physics I  5
PHYS 1212  University Physics II  5
PHYS 1213  University Physics III  5

Total Credits  55

Environmental Chemistry
Bachelor of Science Major Requirements
(183 credits required for the degree) (p. 40)

Minimum of 45 credits in chemistry. Requirements include the following:

Required CHEM coursework
CHEM 1010 & CHEM 1240  General Chemistry and General Chemistry Lab  4
CHEM 2451 & CHEM 2461  Organic Chemistry I and Organic Chemistry Lab I  4
CHEM 2452 & CHEM 2462  Organic Chemistry II and Organic Chemistry Lab II  4
CHEM 2453 & CHEM 2463  Organic Chemistry III and Organic Chemistry Lab III  4
CHEM 2011 & CHEM 2041  Analysis Equilibrium Systems and Analysis Equilibrium Systems Lab  4
CHEM 2131 & CHEM 2141  Chemistry of the Elements and Chemistry of the Elements Lab  4
CHEM 3210  Instrumental Analysis  4
CHEM 3610  Physical Chemistry I  3
CHEM 3500  Chemistry Frontiers  3
CHEM 3410  Atmospheric Chemistry  3
CHEM 3411  Aquatic Chemistry  3
CHEM 3412  Environmental Chemistry & Toxicology  3
CHEM 3995  Research in Chemistry  1

Total Credits  45

1 Or industrial research or field project

Additional Requirements

Biology  1
BIOL 1010 & BIOL 1020  Physiological Systems and Physiological Systems Lab  5
BIOL 1011 & BIOL 1021  Evolution, Heredity and Biodiversity and Evolution, Heredity and Biodiversity Lab  5

Geography  1
GEOG 1201  Environmental Systems: Weather  4
GEOG 1202  Environmental Systems: Hydrology  4
GEOG 1203  Environmental Systems: Landforms  4

**Calculus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951  Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952  Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962  Honors Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1953  Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963  Honors Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

**Physics**

One year, preferably:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211  University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212  University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213  University Physics III</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total Credits**  49

1  Of the two minors required for this BS degree, one must be in biology or geography.

The recommended order of courses is listed below for each degree. However, this order is not absolutely required. Please consult your advisor each quarter.

**Chemistry**

**Bachelor of Arts (p. 38)**

Chemistry credit: 40; calculus credit: 12; physics credit: 15

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Credits</th>
<th>Winter</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>3</td>
<td>CHEM 2461</td>
<td>1</td>
<td>CHEM 2452</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1</td>
<td>MATH 1952 or 1962</td>
<td>4</td>
<td>MATH 1953 or 1963</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4</td>
<td>CHEM 2451</td>
<td>3</td>
<td>CHEM 2462</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fall</th>
<th>Credits</th>
<th>Winter</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2453</td>
<td>3</td>
<td>CHEM 2011</td>
<td>3</td>
<td>CHEM 2131</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 2463</td>
<td>1</td>
<td>CHEM 2041</td>
<td>1</td>
<td>CHEM 2141</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Physics and lab 1</td>
<td>5</td>
<td>Physics and lab</td>
<td>5</td>
<td>Physics and lab</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Fall</th>
<th>Credits</th>
<th>Winter</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3610</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>CHEM 3210</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>Fall</th>
<th>Credits</th>
<th>Winter</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives 2</td>
<td></td>
<td>CHEM 3500</td>
<td>3 Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 67**

1  One year of calculus is required. One year of University Physics (recommended) or General Physics is required. Physics is a prerequisite for Physical Chemistry. The third quarter of physics may be taken at the same time as Physical Chemistry I. Students are encouraged to take Physical Chemistry II and III.

2  Chemistry/biochemistry electives: six credits of 3000-level courses.

**Bachelor of Science (p. 40)**

Chemistry credit: 45; calculus credit: 12; physics credit: 15

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Credits</th>
<th>Winter</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>3</td>
<td>CHEM 2461</td>
<td>1</td>
<td>CHEM 2462</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1</td>
<td>MATH 1952 or 1962</td>
<td>4</td>
<td>MATH 1953 or 1963</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Chemistry (p. 46)

Chemistry credit: 60; math and computer science credit: 20; physics credit: 15

<table>
<thead>
<tr>
<th>First Year</th>
<th>Credits</th>
<th>Winter</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>3</td>
<td>MATH 1952 or 1962</td>
<td>4</td>
<td>CHEM 2452</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1</td>
<td>CHEM 2451</td>
<td>3</td>
<td>CHEM 2462</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4</td>
<td>CHEM 2461</td>
<td>1</td>
<td>MATH 1953 or 1963</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Credits</th>
<th>Winter</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>3</td>
<td>CHEM 2101</td>
<td>3</td>
<td>CHEM 2131</td>
</tr>
<tr>
<td>CHEM 2463</td>
<td>1</td>
<td>CHEM 2041</td>
<td>1</td>
<td>Physics and lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Physics and lab</td>
<td>5 CHEM 2141</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Credits</th>
<th>Winter</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>3</td>
<td>CHEM 3620</td>
<td>3</td>
<td>CHEM 3621</td>
</tr>
<tr>
<td>Physics and lab</td>
<td>5</td>
<td>CHEM 3210</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>Credits</th>
<th>Winter</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research (or electives)</td>
<td>2</td>
<td>Electives</td>
<td></td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHEM 3500</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 87

1 20 credits of math and computer science is required, including one year of calculus. One year of University Physics (recommended) or General Physics is required. Physics is a prerequisite for Physical Chemistry. The third quarter of physics may be taken at the same time as Physical Chemistry I.

2 Chemistry/biochemistry electives: 14 credits including a minimum of six credits of research. The remaining electives must be taken at the 3000-level.
### Biochemistry

#### Bachelor of Science (p. 40)

Chemistry credit: 46; biological sciences credit: 25; calculus credit: 12; physics credit: 15

<table>
<thead>
<tr>
<th>First Year</th>
<th>Credits Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>3 BIOL 1011</td>
<td>4 CHEM 2452</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1 BIOL 1021</td>
<td>1 CHEM 2462</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4 CHEM 2451</td>
<td>3 BIOL 1010</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 2461</td>
<td>1 BIOL 1020</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MATH 1952 or 1962</td>
<td>4 MATH 1953 or 1963</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Credits Winter</td>
<td>Credits Spring</td>
<td>Credits</td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>3 CHEM 2011</td>
<td>3 CHEM 2131</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2463</td>
<td>1 BIOL 2510 &amp; BIOL 2511</td>
<td>5 CHEM 2141</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>4 Physics and lab</td>
<td>5 BIOL 2000/3000-level elective</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 2121</td>
<td>1 CHEM 2041</td>
<td>1 Physics and lab</td>
<td>5</td>
</tr>
<tr>
<td>Physics and lab</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Third Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Credits Winter</td>
<td>Credits Spring</td>
<td>Credits</td>
</tr>
<tr>
<td>CHEM 3811</td>
<td>3 CHEM 3812</td>
<td>3 CHEM 3813</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3610</td>
<td>3 CHEM 3820</td>
<td>3 CHEM 3210</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Fourth Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Credits Winter</td>
<td>Credits Spring</td>
<td>Credits</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits: 98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. One year of calculus is required. One year of University Physics (recommended) or General Physics is required. Physics is a prerequisite for Physical Chemistry. The third quarter of physics may be taken at the same time as Physical Chemistry I. Students are encouraged to take Physical Chemistry II and III.

2. Biological sciences elective may be completed at any time.

3. Chemistry/biochemistry electives: three credits from 3000-level courses.

4. Biochemistry majors are encouraged to take both Biochemistry Lab and Research even if it takes their total chemistry credits over 46. Research may be substituted for Biochemistry Lab in certain cases. Prior approval of the Biochemistry Lab instructor is required.

#### Bachelor of Science in Chemistry with Biochemistry Concentration (p. 46)

Chemistry credit: 60; biological sciences credit: 20; math and computer science credit: 20; physics credit: 15

<table>
<thead>
<tr>
<th>First Year</th>
<th>Credits Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>3 BIOL 1021</td>
<td>1 BIOL 1010</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1 CHEM 2451</td>
<td>3 CHEM 2452</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4 BIOL 1011</td>
<td>4 CHEM 2462</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CHEM 2461</td>
<td>1 BIOL 1020</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MATH 1952 or 1962</td>
<td>4 MATH 1953 or 1963</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Credits Winter</td>
<td>Credits Spring</td>
<td>Credits</td>
</tr>
<tr>
<td>CHEM 2453</td>
<td>3 CHEM 2011</td>
<td>3 CHEM 2131</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2463</td>
<td>1 CHEM 2041</td>
<td>1 Physics and lab</td>
<td>5</td>
</tr>
<tr>
<td>Math or computer science</td>
<td>4 Physics and lab</td>
<td>5 CHEM 2141</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>4 Biological sciences elective</td>
<td>5 Math or computer science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2121</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>
### Environmental Chemistry

**Bachelor of Science (p. 40)**

Chemistry credit: 45; calculus credit: 12; physics credit: 15

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1010</td>
<td>3 CHEM 2461</td>
<td>1 CHEM 2452</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1240</td>
<td>1 MATH 1952 or 1962</td>
<td>4 CHEM 2462</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MATH 1951(^1)</td>
<td>4 BIOL 1011</td>
<td>4 MATH 1953 or 1963</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 2451</td>
<td></td>
<td>3 BIOL 1010</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 1021</td>
<td></td>
<td>1 BIOL 1020</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>CHEM 2453</td>
<td>3 CHEM 2011</td>
<td>3 CHEM 2131</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 2463</td>
<td>1 GEOG 1202</td>
<td>4 CHEM 2141</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GEOG 1201(^2)</td>
<td>4 Physics and lab</td>
<td>5 GEOG 1203</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Physics and lab(^1)</td>
<td>5 CHEM 2041</td>
<td>1 Physics and lab</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>CHEM 3610</td>
<td>3 CHEM 3412</td>
<td>3 CHEM 3210</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 3410</td>
<td>3</td>
<td>CHEM 3411</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Field project or research</td>
<td>1 CHEM 3500</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field project or research</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits: 115</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. 20 credits of math or computer science is required, including one year of calculus. One year of University Physics (recommended) or General Physics is required. Physics is a prerequisite for Physical Chemistry. The third quarter of physics may be taken at the same time as Physical Chemistry I. Students are encouraged to take Physical Chemistry II and III.

2. Complete a 2000- or 3000-level biological sciences course.

3. Chemistry/biochemistry electives: eight credits including a minimum of six credits of research with a written research report. The remaining elective credit must be from 3000-level courses.

---
Courses

CHEM 1001 Science of Contemporary Issues I (4 Credits)
CHEM 1001 is the first class in a three-quarter sequence focused on real-world applications of chemistry. The first quarter focuses on sustainability, pollution, and climate change. To understand these topics, we will explore the behavior of gases, properties of solutions, chemical reactions in the atmosphere, and acid-base chemistry. This course cannot be taken for credit for a chemistry major or minor. A lab fee is associated with this course. The course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

CHEM 1002 Science of Contemporary Issues II (4 Credits)
CHEM 1002 is the second class in a three-quarter sequence focused on real-world applications of chemistry. This course focuses on fossil fuels, renewable resources, nuclear energy, batteries, and fuel cells. To understand these topics, we will examine combustion reactions, radioactive elements, nuclear waste, and electrochemistry. This course cannot be taken for credit for a chemistry major or minor. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: CHEM 1001.

CHEM 1003 Science of Contemporary Issues III (4 Credits)
CHEM 1003 is the final class in a three-quarter sequence focused on real-world applications of chemistry. This course focuses on plastics, nutrition, drugs, and genetic engineering. To understand these topics, we will learn about polymerization, macromolecules, and the chemistry behind foods such as fats, proteins, and carbohydrates. This course cannot be taken for credit for a chemistry major or minor. A lab fee is associated with this course. The course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: CHEM 1002.

CHEM 1010 General Chemistry (3 Credits)
For natural science and engineering majors. Atomic and molecular structure, reactions in solution, thermochemistry and thermodynamics. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: CHEM 1240.

CHEM 1240 General Chemistry Lab (1 Credit)
Laboratory to accompany CHEM 1010. Experiments illustrate aspects of atomic structure, chemical bonding and thermodynamics. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: CHEM 1010.

CHEM 1610 General Chemistry for Engineers (3 Credits)
Lecture course for engineering majors and other science majors with strong background in chemistry. Topics covered include atomic and molecular structure, reactions in solution, thermochemistry and thermodynamics, electrochemistry and intermolecular forces. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Corequisite: CHEM 1640. Prerequisite: MATH 1951.

CHEM 1640 Chemistry for Engineers Lab (1 Credit)
Laboratory to accompany CHEM 1610. Experiments illustrate aspects of atomic structure, chemical bonding, and thermodynamics. Lab fee associated with this course. Corequisite: CHEM 1610.

CHEM 1992 Directed Study (1-10 Credits)
CHEM 2011 Analysis Equilibrium Systems (3 Credits)
Chemical equilibria, starting from simple examples and extending to complex systems, including salt solutions, acids and bases, and metal complex formation. Prerequisites: CHEM 1010 and CHEM 1240. Corequisite: CHEM 2041.

CHEM 2041 Analysis Equilibrium Systems Lab (1 Credit)

CHEM 2131 Chemistry of the Elements (3 Credits)
Descriptive chemistry of main group and transition elements including redox and coordination chemistry. Prerequisites: CHEM 2011 and CHEM 2041. Corequisite: CHEM 2141.

CHEM 2141 Chemistry of the Elements Lab (1 Credit)
Laboratory to accompany CHEM 2131. Study of reactions of main group and transition elements including redox and coordination chemistry. Prerequisites: CHEM 2011 and CHEM 2041. Lab fee associated with this course. Corequisite: CHEM 2131.

CHEM 2240 Introduction to Environmental Chemistry (4 Credits)
An introduction to the chemistry of the environment. Topics cover the chemistry of air, water, and soil with a special focus on the influence that humankind has on the natural environment. Course provides tools to understand environmental science from a chemical perspective. The course is a combined lecture and laboratory. Primarily for environmental science majors. Prerequisites: CHEM 1010, CHEM 1040, CHEM 2451, and CHEM 2461.

CHEM 2451 Organic Chemistry I (3 Credits)
Structure and reactions of covalent compounds of carbon. Satisfies organic chemistry requirement in chemistry, biology and related fields. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisites: CHEM 1010 and CHEM 1240. Corequisite: CHEM 2461.

CHEM 2452 Organic Chemistry II (3 Credits)
CHEM 2453 Organic Chemistry III (3 Credits)

CHEM 2461 Organic Chemistry Lab I (1 Credit)
Laboratory course in theory and practice of preparative and analytical organic chemistry, including introduction to IR and NMR spectroscopy. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: CHEM 2451.

CHEM 2462 Organic Chemistry Lab II (1 Credit)
Laboratory course in theory and practice of preparative and analytical organic chemistry, including introduction to IR and NMR spectroscopy. Lab fee associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Co-requisite: CHEM 2452.

CHEM 2463 Organic Chemistry Lab III (1 Credit)
Laboratory course in theory and practice of preparative and analytical organic chemistry, including introduction to IR and NMR spectroscopy. Lab fee associated with this course. Co-requisite: CHEM 2453.

CHEM 2701 Topics in Chemistry (1-4 Credits)
Topical course changes with subject matter. Restricted to sophomore level students or above.

CHEM 2900 Careers in Chemistry & Biochemistry (1,2 Credit)
This course is designed to give students in the natural and physical sciences total exposure to opportunities after graduation. This will encompass graduate schools, professional school, industry, education and government.

CHEM 2992 Directed Study (1-10 Credits)

CHEM 3110 Chemical Systems I (3 Credits)
Advanced discussion of modern concepts of organic chemistry; bonding, stereochemistry, reaction mechanisms. Prerequisites: CHEM 2453 and equivalent of one year of physical chemistry.

CHEM 3120 Chemical Systems II (3 Credits)
Interpretation of trends in the chemistry of the elements in terms of orbital interactions. Most examples will be taken from the third row transition metals and the boron and carbon groups. Prerequisites: CHEM 2131, CHEM 3310 and CHEM 3110.

CHEM 3130 Chemical Systems III (3 Credits)
Advanced-level physical biochemistry course intended for advanced-level undergraduates and graduate students. Focuses on kinetic, thermodynamic and dynamic aspects of biopolymers; delineates the relationship of these properties to the mechanism and function of biological macromolecules. Prerequisites: CHEM 3811, CHEM 3812, CHEM 3813, CHEM 3610 or the equivalent.

CHEM 3210 Instrumental Analysis (4 Credits)
Course focus is toward students' understanding of instrumental components and the theory behind both component's and instrument's operation. Emphasis is on techniques such as spectroscopy and chromatography. Students will experience extensive hands-on use of a number of instruments. Course provides a strong background for Chemistry Frontiers (CHEM 3500) and emphasizes techniques and skills sought by chemical and biotechnology industries. Prerequisites: CHEM 2011 and CHEM 2041.

CHEM 3220 Advanced Analytical Chemistry (3 Credits)
Principles of chemical instrumentation applied to analytical measurements; principles, instrumentation and applications of spectrometric and chromatographic measurements. Prerequisites: CHEM 2011 and CHEM 3621, or the equivalent.

CHEM 3310 Structure and Energetics I (3 Credits)
Fundamentals of quantum chemistry, and introduction to symmetry and molecular structure of small and large systems. Prerequisite: one year of physical chemistry.

CHEM 3320 Structure and Energetics II (3 Credits)
Computational methods in chemistry. Prerequisites: CHEM 3310, one year of physical chemistry.

CHEM 3410 Atmospheric Chemistry (3 Credits)
The concepts of equilibrium thermodynamics, kinetics, and photochemistry will be applied to understanding atmospheric processes. Covers urban air pollution in detail with focus on primary pollutants. Also covers stratospheric chemistry with focus on ozone chemistry and the chemistry of climate change. Prerequisites: CHEM 2011, CHEM 2041, CHEM 2131, CHEM 2453, and CHEM 2463.

CHEM 3411 Aquatic Chemistry (3 Credits)
The circulation of the oceans and their chemical make-up. 'Classical water pollution problems' like biological oxygen demand and turbidity are discussed. Also presented: aquifer structure and flow, ground water chemistry, pollutant partitioning between stationary and mobile phases, heterogeneous surface chemistry, and the detection of trace contaminants. Prerequisites: CHEM 2011, CHEM 2041, CHEM 2131, CHEM 2453, CHEM 2463 or instructor's permission.

CHEM 3412 Environmental Chemistry & Toxicology (3 Credits)
A survey of environmental toxicology concepts: animal testing, dose-response data, epidemiology, risk assessment. The course includes ecotoxicology, focusing on the alteration of biological and chemical systems beyond the simple response of an individual to an environmental chemical. Prerequisites: CHEM 2011, CHEM 2041, CHEM 2131, CHEM 2453, CHEM 2463 or instructor's permission.
CHEM 3500 Chemistry Frontiers (3 Credits)
Advanced-level laboratory course required for all undergraduates majoring in chemistry or environmental chemistry. Emphasis on the development of oral, written, computer and presentation skills necessary for success as a scientist. Skills will be honed through state-of-the-art laboratory experiences from diverse areas of chemistry. Lab fee associated with this course. Prerequisites: CHEM 3210 and CHEM 3610.

CHEM 3610 Physical Chemistry I (3 Credits)
Fundamentals of thermodynamics, including phase and reaction equilibria, properties of solutions, and electrochemistry needed for advanced study in life sciences and for Physical Chemistry II and III. May be taken for graduate credit by nonchemistry majors. Prerequisites: CHEM 2011, calculus and physics.

CHEM 3620 Physical Chemistry II (3 Credits)
Fundamentals of quantum chemistry, including theories of atomic and molecular structure and spectroscopy. May be taken for graduate credit by nonchemistry majors. Prerequisite: CHEM 3610.

CHEM 3621 Physical Chemistry III (3 Credits)
Fundamentals of kinetic theory and statistical mechanics. May be taken for graduate credit by nonchemistry majors. Prerequisite: CHEM 3620.

CHEM 3703 Topics in Organic Chemistry (3 Credits)
May include organic photochemistry, organic synthesis, organic electrochemistry or natural products. May be repeated for credit. Prerequisites: CHEM 2453 or equivalent and others depending on topic.

CHEM 3705 Topics in Biochemistry (3,4 Credits)
May include physical techniques for exploring biological structure, biological catalysis, and selected fields within biochemistry taught from original literature. May be repeated for credit. Prerequisites: CHEM 3811, CHEM 3812, CHEM 3813.

CHEM 3811 Biochemistry-Proteins (3 Credits)
Protein structure and function, starting with the building blocks and forces that drive the formation of protein structure and the basic concepts of protein structure, and continuing with enzyme catalysis, kinetics, and regulation. Prerequisites: CHEM 2453 and CHEM 2011, or instructor permission.

CHEM 3812 Biochemistry-Membranes/Metabolism (3 Credits)
Membranes and membrane mediated cellular processes, energy and signal transduction, and metabolic/biosynthetic pathways. Prerequisite: CHEM 3811.

CHEM 3813 Biochemistry-Nucleic Acids (3 Credits)
Molecular processes underlying heredity, gene expression and gene regulation in prokaryotes and eukaryotes. Prerequisite: CHEM 2453.

CHEM 3820 Biochemistry Lab (3 Credits)
Purification and properties of biological molecules and structures. Lab fee associated with this course. Prerequisite: CHEM 3811.

CHEM 3831 Advanced Protein Biochemistry (3 Credits)
This course provides fundamental insights into the chemistry and physics of proteins. It investigates how amino acids form proteins with highly complex three-dimensional structures and how these structures mediate function. We examine key research articles and their contribution to our current understanding of proteins. Topics range from protein folding to enzyme kinetics and emphasize basic principles.

CHEM 3991 Independent Study (1-10 Credits)
May be repeated for credit.

CHEM 3992 Directed Study (1-10 Credits)

CHEM 3995 Research in Chemistry (1-10 Credits)
Research project conducted under guidance of a faculty member. Credit hours and projects arranged on an individual basis. May be repeated for credit.

Department of Communication Studies

Office: Sturm Hall, Room 200
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2385
Email: ugcomn@du.edu
Web Site: http://www.du.edu/ahss/schools/comn

Undergraduates studying communication in the Department of Communication Studies are offered an exciting window into the role that communication plays in the human condition. That is, we are committed to the notion that communication plays a crucial role in shaping the world around us and that, as a result, the way that we communicate can contribute to the type of world in which we wish to live. Thus, our courses are committed to exploring the role of communication in fostering high-quality human relations in interpersonal, organizational, cultural and public contexts.

We see the merit in asking a range of empirical, interpretive and critical questions about how our communication with one another occurs. Such questions are grounded in the foundational premise that human interaction is fundamental to the construction, development and maintenance of personal, social and institutional relationships and to the organization of social life as we know it today.

College graduates face a world where they can expect to change careers several times over but know that, no matter what career they choose, they will have to communicate in order to be successful. Further, workplace success depends on the ability to communicate with others. Workers across all
careers in all fields communicate through various means—face-to-face and electronic. A major in communication studies cultivates the skills and theory that go together to help create successful lives and careers.

Studying communication offers excellent preparation for students interested in careers in law, politics, business, health, nonprofits, the arts and many more. Additionally, many of our graduates attend graduate school to study communication studies, business and law. Further, our students know that their ability to understand communication will have a profound influence on the quality of their lives beyond their careers, extending into their personal, familial and civil lives.

**Communication Studies**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

40 credits, including the following:

<table>
<thead>
<tr>
<th>Foundations</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMN 1210</td>
<td>Foundations of Communication Studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performative Courses</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>COMN 1011</td>
<td>Comm through Literature</td>
</tr>
<tr>
<td>COMN 1012</td>
<td>Speaking on Ideas that Matter</td>
</tr>
<tr>
<td>COMN 1015</td>
<td>Voice and Gender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Inquiry Courses</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select two of the following:</td>
<td></td>
</tr>
<tr>
<td>COMN 2110</td>
<td>Quantitative Inquiry in Communication</td>
</tr>
<tr>
<td>COMN 2150</td>
<td>Rhetorical/Critical Communication Inquiry</td>
</tr>
<tr>
<td>COMN 2200</td>
<td>Qualitative Inquiry in Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breadth Requirements</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 12 credits (three courses) is required. One of which must be a 1000 level course (with the exception of COMN 1210, COMN 1011, COMN 1012, COMN 1015). One of which must be a 2000 level course (with the exception of COMN 2110, COMN 2200, COMN 2150).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth Electives</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of three 3000 level courses (12 credits) is required. One of which must be a Capstone Seminar or an Internship (by application only). Completion of the disciplinary core sequence</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 40

**Secondary Major**

40 credits. Same requirements as for BA degree.

**Minor Requirements**

20 credits, including the following:

<table>
<thead>
<tr>
<th>Foundations</th>
<th>4</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Performative Courses</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>COMN 1011</td>
<td>Comm through Literature</td>
</tr>
<tr>
<td>COMN 1012</td>
<td>Speaking on Ideas that Matter</td>
</tr>
<tr>
<td>COMN 1015</td>
<td>Voice and Gender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Contexts Courses</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select two communication contexts courses</td>
<td></td>
</tr>
<tr>
<td>COMN 1100</td>
<td>Communication in Personal Relationships</td>
</tr>
<tr>
<td>COMN 1200</td>
<td>Small Group Communication</td>
</tr>
<tr>
<td>COMN 1550</td>
<td>Communication in the Workplace</td>
</tr>
<tr>
<td>COMN 1600</td>
<td>Communication and Popular Culture</td>
</tr>
<tr>
<td>COMN 1700</td>
<td>Fundamentals of Intercultural Communication</td>
</tr>
</tbody>
</table>
Exploring Communication Contexts and Depth Electives

Choose two (8 credits) 2000-level or 3000-level courses with the exception of inquiry (COMN 2110, COMN 2200, COMN 2150) and capstone (COMN 3990) courses.

Total Credits 20

Courses

COMN 1011 Comm through Literature (4 Credits)
This course emphasizes the analysis and performance of diverse forms of literature. In addition to the dramaturgical elements of interpretation that are highlighted in this course, students learn how to contextualize serious public issues through literature while developing confidence and skills as performers and public speakers.

COMN 1012 Speaking on Ideas that Matter (4 Credits)
The purpose of this course is to assist students in becoming more competent and comfortable when speaking about their opinions. Students learn how to develop and analyze rhetorical arguments, including the full range of the speech-making process, but especially how to support those opinions they assert. Assignments, class discussions and course materials provide students with a foundation of knowledge and practical application of speaking skills, which will prove useful in a variety of personal, professional, and public contexts.

COMN 1015 Voice and Gender (4 Credits)
In this course, students explore gender in personal and political contexts with the intent of developing their individual voices in these arenas. Students learn to express creatively their voice through strengthening both their written and oral communication skills. This course also discusses gender issues prevalent in today's society and significant moments in rhetorical history that have impacted these issues. Cross listed with GWST 1015.

COMN 1100 Communication in Personal Relationships (4 Credits)
Relationships have a direct and lasting impact on us: they shape who we are, and the paths we take toward who we will become. The purpose of this course is to analyze and apply theories and research relevant to communication processes in a variety of personal relationships. Discussion of issues such as attachment, identity, hetero- and homosexual relationships, family communication, conflict, and intrapersonal discourses will provide students a foundation on which to build skills useful in a variety of personal relationships. In Communication in Personal Relationships, students will: sensitively express attitudes and discuss research about different issues pertinent to the study of personal relationships; develop the skills to critically analyze their own relationships and the relationships of others; reflect on and challenge their and others' ideas in a critically constructive manner so that we arrive at a new level of understanding together; and demonstrate the ability to apply communication and interpersonal theories and research outside of this classroom upon completion of the course.

COMN 1200 Small Group Communication (4 Credits)
This course approaches small group communication through a combination of theory and practice. Theories related to group development and leadership, collaborative communication, dialogue and rhetorical sensitivity, and principled negotiation and consensus, are explored through group discussions, research, case studies and presentations. Students have the opportunity to: strengthen their critical thinking and listening skills; confidently voice their identity within a greater community; increase their ability in writing and presenting their thoughts; and develop communication competence by facilitating civility within small group settings.

COMN 1210 Foundations of Communication Studies (4 Credits)
This course offers students an introduction to the study of communication. Students will explore the role of communication in domains that cut across the spectrum of human social life, from communication among individuals, to relationships, to marriage and families, to groups, to organizations, to communication at societal and global levels. In addition to focusing on the specific nature of communication in these distinct settings, students learn as well the different conceptual models for describing and understanding communication across these settings. This course counts toward the Scientific Inquiry: Society and Culture requirement.

COMN 1350 Communication in the Workplace (4 Credits)
This course offers a topics-based introduction to the study and practice of communication in a variety of organizational settings. The emphasis is on issues of power, politics, globalization, culture, diversity, relationships, and conflict. Students learn how to recognize, diagnose, and solve communication related problems in the workplace.

COMN 1600 Communication and Popular Culture (4 Credits)
This course uses various landmark theories and perspectives to analyze popular culture, with a particular emphasis on the importance of communication in the production and consumption of culture. We will examine various artifacts of popular culture including music, movies, texts, advertisements, clothing, and other relevant pieces of popular culture. In the course of this exploration, we will study the development of culture by applying different theories or 'lenses' to these artifacts. Students will experience and analyze various aspects of popular culture including production and consumption, in addition to how these processes work within the context of globalization. We will take a critical perspective in which we will challenge our own conceptions and consumption of popular culture. The goal of this course is to combine relevant theories with your own observations and interests in order to develop a careful, critical, and constructive analysis of popular culture.
COMN 1700 Fundamentals of Intercultural Communication (4 Credits)
This course explores the fundamental concepts and issues in intercultural communication. We will examine the complex relationship between culture and communication from different conceptual perspectives and consider the importance of context and power in intercultural interactions. In addition to learning theory and applying different approaches to the study of intercultural communication, this course asks that you consider your own cultural identities, values, beliefs, assumptions, worldviews, etc. through participation in class discussions. Our discussions will enhance self-reflection, critical thinking, and your own awareness to the complexity of intercultural communication. You can expect that your classmates possess varying perspectives about the materials being covered in class. We will work hard to help everyone develop their perspective and voice, embracing such factors as cultural background, race, class, gender, and sexuality.

COMN 1992 Directed Study (1-10 Credits)

COMN 2030 Social Movement Rhetoric (4 Credits)
This course explores the principle agency that less powerful groups have used for social change in recent U.S. history--the rhetoric of social movement. More specifically, we consider in concrete detail and theoretical nuance the capacity of ordinary people to persuade others, voice grievances, and thus challenge broader society. Our explorations focus primarily on the rhetoric of dissident (non-majority, non-State, often un-institutionalized and non-normative) voice in our culture--both on the “right” and the “left”-- as they have sought, and continue to seek, social change. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2110 Quantitative Inquiry in Communication (4 Credits)
This course is designed to introduce students to the process of reading, analyzing, conducting and critiquing quantitative research in communication studies. Research is a pervasive aspect of contemporary life, both inside and outside of the university. As such, many of the jobs taken by communication studies majors require, or are at the very least enhanced by, the ability to conduct and interpret research. This course introduces students to the various aspects associated with quantitative research methods in an effort to illuminate the significance of research about communication in our lives and help students act as critical consumers of the research encountered.

COMN 2115 Performance & Social Change (4 Credits)
In this course students explore the possibilities of making political performances, or making performances political. We examine and create performances that take place in public by-ways rather than theatre buildings, and that are intended to question or re-envision dominant arrangements of power. We are particularly concerned with how performance may contribute to processes of social change. The course also guides students through the process of creating new works of theatre for social change, focusing on political issues chosen by students themselves.

COMN 2120 Collaborative Leadership (4 Credits)

COMN 2130 Introduction to Organizational Communication (4 Credits)
This is a theory-driven course which will introduce students to the major approaches to the study of organizational communication, including classical, managerial, systems, cultural, and critical perspectives. The course uses these perspectives to deepen students’ understandings of the organizational communication topics developed in COMN 1550, teaching students how to recognize and approach organizational communication issues from a variety of perspectives.

COMN 2140 The Dark Side of Relationships (4 Credits)
This course is designed to familiarize students with theory and research that focuses on the dark and bright sides of human relationships. In particular, we explore those dysfunctional, distorted, distressing, and destructive elements that sometimes comprise our relations with family members, friends, co-workers, and romantic partners, for example. Additionally, we explore relational issues that typically are presumed to be dark but function to produce constructive outcomes, as well as phenomena that are typically judged as bright but function to produce destructive relational outcomes.

COMN 2150 Rhetorical/Critical Communication Inquiry (4 Credits)
This course focuses on the process of interpreting, understanding, and evaluating everyday persuasive acts for the purpose of sharing insights and influencing the community audience. This course fosters a variety of analytical skills, including how to describe primary rhetorical acts (such as speeches, films, news coverage, television programs, songs, advertisements, and public commemorative art, among others) in rich, relevant detail; how to situate or make sense of rhetorical acts within their historical, cultural moments; and how to use theory to develop a critical perspective that helps to render a judgment about a text or act. Students sharpen critical instincts by working through the invention process to produce a piece of rhetorical or cultural criticism.

COMN 2200 Qualitative Inquiry in Communication (4 Credits)
This course focuses on introducing students to a selection of qualitative methods used in communication research. The class covers the basic techniques for collecting, interpreting, and analyzing qualitative data. Throughout the term, the course operates on two interrelated dimensions: one focused on the theoretical approaches to various types of qualitative research, and the other focused on the practical techniques of data collection and analysis, such as interviewing and collecting field notes.

COMN 2210 Gender, Communication, Culture (4 Credits)
This course considers how gender is created, maintained, repaired, and transformed through communication in particular relational, cultural, social, and historical contexts. This course is designed to help students develop thoughtful answers to the following questions: What is gender, how do we acquire it, how do cultural structures and practices normalize and reproduce it, and how do we change and/or maintain it to better serve ourselves and our communities? Throughout the term, we explore how dynamic communicative interactions create, sustain, and subvert femininities and masculinities “from the ground up.” This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with GWST 2212.
COMN 2220 Race and Popular Culture (4 Credits)
This course examines trajectories of representations of race in popular culture (i.e., film, music, television), both produced by the dominant culture, as well as self-produced by various racial and ethnic groups. Through a historical perspective, we trace images in popular culture and how those images are tied to contemporary events of the time. We pay particular attention not only to the specific archetypes that exist, but also how those archetypes are nuanced or colored differently through the lenses of ethnicity, nationality, race, class, gender, and sexuality. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2300 Fundamentals of Argumentation (4 Credits)
This class offers a survey of approaches to the study of argumentation. We are going to examine and evaluate how argument is understood from various perspectives within the discipline of communication studies. We will engage theoretical concerns related to argumentation with a commitment to test their applicability to current events and issues. We will also explore how arguments are practiced in areas such as the arts and the media, legal contexts, interpersonal communication, public deliberation, and the sciences. The course will focus on expanding your contextual knowledge of how arguments operate within our culture and on cultivating your ability to read critically and creatively, make cogent arguments, assess opposing arguments charitably, and communicate your judgments effectively. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2400 Landmarks in Rhetorical Theory (4 Credits)
This course is a survey of some of the major conceptual innovations in the history of rhetorical theory. In particular we will investigate the conceptions of rhetoric prevalent in antiquity and how they inform contemporary perspectives on rhetoric. In order to carry this off, we will conceptualize rhetoric as an attempt to answer the following questions: what is the relationship between what is true and what is the good. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2450 Between Memory & Imagination (4 Credits)
How do our human memories and imaginations give rise to the stories we tell and to the selves that we are becoming? This course considers the nature of memory and its relationship to imagination, both in the evolving life of the individual and in the development of the larger group or culture. We examine the self, then, as both singular and collective, fixed and in flux, determined inwardly and shaped by external forces. We look at the relationship of identity to power, and address the question of how re-considering memory and identity might open up new imaginative spaces in global contexts. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2470 Gender and Communication (4 Credits)
Sex differences in communication behavior, treatment of women in language, women on public platforms and women's portrayal in media.

COMN 2471 The Social Construction of Travel (4 Credits)
Travel encompasses the myriad ways in which people and ideas become mobile. The goal of this course is to introduce students to various theoretical issues concerning travel. While the study of travel has been pursued in the context of tourism, commerce, and religion, in this course we also consider the effect of travel on the body of the traveler. We examine travel within many contexts having different registers of meaning - "vacation," "pilgrimage," "migration." However, the very nature of travel is that it transports bodies and ideas across multiple frameworks at a time. Therefore, we also consider how travel is understood within and as various cultural contexts. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2541 Advanced Debate and Forensic Activities (1-4 Credits)
This course serves as a practicum for students interested in developing advanced argumentation skills. The focus is on preparing students for competition in intercollegiate debate. Students engage in in-depth research of debate topics, as well as participate in substantial practice of arguments and positions developed as necessary to prepare for intercollegiate competition.

COMN 2500 Landmarks in Rhetorical Theory (4 Credits)
This course is a survey of some of the major conceptual innovations in the history of rhetorical theory. In particular we will investigate the conceptions of rhetoric prevalent in antiquity and how they inform contemporary perspectives on rhetoric. In order to carry this off, we will conceptualize rhetoric as an attempt to answer the following questions: what is the relationship between what is true and what is the good. This course counts toward the Analytical Inquiry: Society and Culture requirement.

COMN 2700 Topics in Communication (1-4 Credits)
COMN 2701 Topics in Communication (1-4 Credits)
COMN 2702 Topics in Communication (1-4 Credits)
COMN 2703 Topics in Communication (1-4 Credits)
COMN 2704 Topics in Communication (1-4 Credits)
COMN 2705 Topics in Communication (1-4 Credits)
COMN 2992 Directed Study (1-10 Credits)
COMN 3005 Diverse Family Communication (4 Credits)
This course explores the communicative experiences of diverse families, focusing on issues surrounding race/ethnicity and sexual orientation. This course aims to further student understandings of the ways diverse families communicate both inside and outside their families.

COMN 3010 Critical Sexuality Studies (4 Credits)
This course takes a critical approach to the study of sexualities by asking us to challenge our assumptions and everyday knowledges about identities, gender, sexuality, race, class, and ethnicity. This course is organized thematically as we explore various topics within the larger study of critical sexuality studies and communication studies. We examine contemporary issues within queer theory, critical race studies, identity politics, feminism, performance studies, and popular culture.

COMN 3015 Culture and Pedagogy (4 Credits)
This seminar invites students to analyze and reflect upon the ways in which individuals and groups have created cultural ideals, images, and constructs of education. The course focuses upon pedagogy broadly conceived as an integral part of a diverse and conflictual society and on how pedagogies shape our understanding and reproduction of, as well as our resistance to, such a society. We explore a variety of conflicting views of what it means to be educated, for what purpose, for what kind of society, and towards what future.
COMN 3020 Conflict Management (4 Credits)
Substantive and relational types of conflict, various strategies for conflict resolution.

COMN 3025 Latina/o Communication Studies (4 Credits)
As the Latina/o population continues to grow in the United States, having become the largest "minority" population in the United States, it becomes increasingly important to understand and respect the cultures of this heterogeneous community. Latina/os are often erroneously subsumed or rendered invisible by dominant constructions of race within the United States that rely on a hegemonic black/white binary. Given the increasing visibility and growth of this course, this course examines the development of Latina/o Studies within the field of communication studies by taking both an historical and a contemporary approach.

COMN 3030 Performance Studies (4 Credits)
This course focuses on the study of performance within the field of communication studies. Unlike theater which tends to focus primarily on traditionally staged performance, in this course we are concerned with performances of everyday life as they relate to identities, ritual, culture, and personal narrative.

COMN 3035 Performing Culture (4 Credits)
This course examines performance as theory and method to understand how everyday and mediated performances communicate a variety of cultural, social, and political perspectives and identities. This course also explores aesthetic, rhetorical, and ethnographic functions of performance and how they implicate cultural identity constructions of self and others.

COMN 3050 Feminism and Intersectionality (4 Credits)
This course offers an overview of feminist theories as they are in dialogue with intersectionality. It offers both a contemporary and historical perspective and is also attentive to the emergence of feminist scholarship in Communication Studies. Cross listed with GWST 3050.

COMN 3110 Intergroup Communication (4 Credits)
This course is designed to provide students with insight into the nature of communication related to the ways that we socially categorize ourselves and others as members of ingroups and outgroups. In particular, students exit the course with a greater understanding of the (a) theoretical foundations of social identity and intergroup relations, (b) communicative and cognitive processes related to social comparison, prejudice, discrimination, and conflict within and between groups, (c) outcomes associated with intergroup contact, and (d) intergroup and social identity processes that underlie past, present, and future social issues.

COMN 3120 Asian Pacific American Communication Studies (4 Credits)
This course examines Asian Pacific American Studies within the field of communication studies by exploring performances, constructions, and representations of Asian Pacific American identities in U.S. education, popular culture, and other everyday contexts. This course will also investigate the implications of U.S. historical, political, and social discourses of race, culture, and identity on Asian Pacific Americans.

COMN 3130 Organizational Communication (4 Credits)
This is an applied course, service learning course, based on a consulting model. While the course will extend and enrich the topical and theoretical knowledge developed in COMN 1550 and COMN 2130, the primary purpose of this course will be to help students explore how they can put such knowledge into practice by collectively working with a local non-profit organization to first diagnose and then propose (and, in some cases implement) solutions to an organizational communication problem faced by that organization.

COMN 3140 Advanced Intercultural Communication (4 Credits)
This course is designed to study the intersection of communication and culture. In this course, culture is defined broadly to include a variety of contexts, such as race, ethnicity, nationality, gender, age, and class. Students gain theoretical and practical understanding of the opportunities and obstacles that exist as individuals and communities communicate within and across cultures.

COMN 3230 Principles of Leadership (4 Credits)
Roles, functions, behaviors that influence and direct; emphasis on interpersonal effectiveness; theories and methods.

COMN 3240 Group Methods and Facilitation (4 Credits)
Discussion and small group methodologies and their theoretical rationale.

COMN 3245 Building Group/Team Effectiveness (4 Credits)
The objectives of this course are to help students acquire a deeper understanding of groups and teams, how they function, and what contributes to their success or failure. It also aims to help students develop the skills and capacities that will allow them to contribute in concrete and significant ways to successful outcomes and satisfying experiences for themselves and others in groups and teams. Cross listed with LDRS 2540.

COMN 3270 Health Communication (4 Credits)
This course examines the role of health communication in our everyday lives. We will focus on communication strategies that inform and influence individuals, families and communities in decisions that enhance health. We will also explore the dynamics and impact of health communication between individuals and the health care system such as doctor-patient communication, dissemination of health related information, and the role of mediated communication in examining health communication.

COMN 3280 Family Communication (4 Credits)
The purpose of this course is to enhance understanding about communication patterns within families. In this course, we will examine theory/research on the role of communication in creating and maintaining healthy marriages and families. Specifically, we will study communication and the family life cycle, different family forms, family race/ethnicity, power in families, conflict in families, communication and stress in families, and communication in the aging family. The course format includes lectures, discussions, analysis of case studies, and in class applications.
COMN 3285 Advanced Relational Communication (4 Credits)
Advanced Relational Communication is intended to increase understanding of relationships from diverse perspectives. The three main perspectives we will investigate show how relationships affect and are affected by their context, the individuals involved, and the relational system. The goals of this course are for students to increase their skill in (1) explaining how knowledge about context, individuals, and relational systems increases understanding of communication processes in a variety of relationships; (2) evaluating critically the information about relationships that we encounter in our everyday lives; (3) asking and investigating questions about real-life relationships.

COMN 3290 Communication and Aging (4 Credits)
In this course, we will focus on the communication processes associated with aging. We will explore the implications of aging and how aging affects the process and outcomes social and relational interactions. We will examine communication and aging through interactional processes (intrapersonal, interpersonal and relational) and through context (organization, family, health, and culture). Emphasis will be placed on the theoretical and applied research in communication and aging.

COMN 3300 Principles of Persuasion (4 Credits)
This course involves a social scientific approach to persuasion and social influence. Some of the topics included in this approach are the relationship between attitude and behavior; characteristics of the source, message, and receiver of a persuasive appeal; and models and theories that explain the effects of persuasive communication. By the end of the course, students should be able to think more critically about the persuasive messages they encounter in everyday life, to apply theoretical models of persuasion, and to construct persuasive messages.

COMN 3310 Globalization, Culture, and Communication (4 Credits)
Drawing from a critical multidisciplinary perspective, this course examines how culture and communication are impacted by globalization. The course explores issues of power and positionality, as well as economic, political, and cultural implications of globalization on people, products, and ideologies in both local and transnational contexts.

COMN 3315 Public Deliberation (4 Credits)
During the last two decades public deliberation has emerged as the centerpiece of theoretical and practical accounts of liberal democracy. This course begins by setting out the nature and functions of public deliberation. We will then track how deliberative democrats respect the traditional accounts of inclusion, equality and reason in an attempt to meet the demands of the deep cultural diversity that marks social life in advanced industrial societies. Specifically we will ask if public deliberation as portrayed in these accounts is sufficient to meet these demands or do we need to expand our understanding of political argument to include a diversity of rhetorical practices? And, once we do expand our account of deliberation how does this transform the traditional problematics of both democratic and rhetorical theory?.

COMN 3425 Rhetoric and Governance (4 Credits)
An introduction to the works of Michel Foucault and his influence on contemporary rhetorical theory. Permission of instructor is required.

COMN 3431 Rhetoric and Communication Ethics Seminar: Communication and Climate Change (4 Credits)
Since the release of Al Gore’s “An Inconvenient Truth,” American public discourse has become increasingly concerned with global warming. Not only is there nearly 100% consensus among climate scientists that human-induced climate change exists, but the severity of global warming is entering the popular imaginary, in the form of journalism, films, etc. But while scientists are committed to slowing global warming, the types of sweeping policy and behavioral changes needed to abate the projected climate catastrophe have been very slow in coming. As such, communication scholars--particularly those concerned with the art of public persuasion--are in a unique position to contribute to this significant and complex issue. In the words of climate scientists Susanne Moser and Lisa Dilling, “We need to open up the communication process to a wider community, in which participants own the process and content of communication.” The goal of this course is to produce original scholarly research in response to Moser and Dilling’s call, to invite more and better communication concerning climate change.

COMN 3435 Rhetoric and Public Life (4 Credits)
An introduction to the conceptual and political history of the public sphere. The course pays particular attention to how the normative assumptions of public communication are affected by the demands of cultural pluralism. Permission from instructor is required.

COMN 3470 Seminar in Free Speech (4 Credits)
This course will survey some of the major conceptual innovations in the justifications of freedom of speech. We will begin with an exploration of the traditional defenses of free speech and then move to a reexamination of those defenses in light of modern communication theory and the challenges of pluralism. In particular we will ask if the justifications of free speech need to be rethought given our understanding of speech as a social force that constitutes identities and values rather than merely expressing private opinions. Moreover, given our understanding of the social force of speech, should we regulate speech that is racist, sexist and seems to erode the foundations of a public culture based on mutual respect and public deliberation over social goods? Can we devise a robust defense of free speech based on its social force that both protects those that may be harmed by antidemocratic discourses and still provides the resources for democratic dissent?.

COMN 3500 Advanced Public Speaking (4 Credits)
Theory, preparation, delivery and evaluation of public speeches.

COMN 3680 Gender and Communication (4 Credits)
This course focuses on the interactive relationships between gender and communication in contemporary U.S. society. This implies three priorities for the class. First, the course explores the multiple ways communication creates and perpetuates gender roles in families, media, and society in general. Second, the course considers how we enact socially created gender differences in public and private settings and how this affects success, satisfaction, and self-esteem. Third, the course connects theory and research to our personal lives. Throughout the quarter, the course considers not only what IS in terms of gender roles, but also what might be and how we, as change agents, may act to improve our individual and collective lives. Cross listed with GWST 3680, HCOM 3680.
COMN 3700 Topics in Communication (1-4 Credits)
COMN 3701 Topics in Communication (1-4 Credits)
COMN 3702 Topics in Communication (1-4 Credits)
COMN 3703 Topics in Communication (1-4 Credits)
COMN 3704 Topics in Communication (1-4 Credits)
COMN 3705 Topics in Communication (1-4 Credits)
COMN 3770 Mediated Communication and Relationships (4 Credits)
This course examines how people develop, define, maintain, and manage interpersonal relationships through their use of mediated communication. We will examine communication in relationships that occur through the internet, text-messaging, cell phones, chat rooms, gaming, and virtual communities. This is a seminar type course where students guide and are guided through their own study of mediated relationships.

COMN 3800 Philosophies of Dialogue (4 Credits)
This course explores the philosophies of dialogue of Martin Buber, Mikhail Bakhtin and others in the context of contemporary communication scholarship on ethics, culture, and relationship. Prerequisite: permission of instructor.

COMN 3850 Communication Ethics (4 Credits)
This class is not just about how to be ethical communicators but it is also about how to discover ethics—the good life and care for others, answerability and responsibility—deep within the structures of human communication itself. The course is committed to a mixture of theory and practice but practice is at the heart of the matter. Half of our sessions will be devoted to dialogue or conversation about ethics in life. There we will try to work as close as we can with ethics in our own lived experience. In the other half, we will explore theory: the ethical/philosophical/communicative ground of ethics.

COMN 3980 Internship (1-8 Credits)
COMN 3990 Communication Capstone (4 Credits)
This course allows students to synthesize knowledges across the communication studies major through original research presentation.

COMN 3991 Independent Study (1-5 Credits)
COMN 3992 Directed Study (1-10 Credits)
COMN 3995 Independent Research (1-10 Credits)
Topics and quarter hours vary. Prerequisite: instructor's permission.

Department of Computer Science

Office: Aspen Hall North, Suite 100
Mail Code: 2280 S. Vine St. Denver, CO 80208
Phone: 303-871-3010
Email: info@cs.du.edu
Web Site: http://www.du.edu/rsecs/departments/cs

The Information Age affects every aspect of society—computer applications, multimedia and the information superhighway. The Department of Computer Science offers four undergraduate programs. Graduates of the program have found employment in all areas of the computer software industry and in the application of computers in a wide variety of companies, ranging from aerospace to insurance. Our graduates work at companies including IBM, Microsoft, Google, Oracle, LinkedIn, Facebook, Raytheon and Amazon. Many alumni have pursued graduate studies in computer science or management information systems at DU and other highly respected universities around the country.

The department offers majors in computer science, applied computing, and game development.

Computer Science

Computer science encompasses the theory and techniques by which information is encoded, stored, communicated, transformed and analyzed. It is concerned with the theory of algorithms (that is, effective procedures or programs), with the structure of languages for the expression of algorithms and with the design of algorithms for the solution of practical problems. A central concern is the study of the computer systems (hardware and software) for the automatic execution of these algorithms.

The Department of Computer Science at the University of Denver offers a bachelor of science in computer science. The degree is strongly based in mathematics and, in fact, a student will automatically acquire sufficient credits for a minor in mathematics. One additional minor is required. The second minor may be in any discipline other than mathematics or computer science.

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

In addition to major course work, a minor in mathematics is required. Please refer to the Department of Mathematics (p. 266) for details.
56 credits, including the following:

- COMP 1671 Introduction to Computer Science I 4
- COMP 1672 Introduction to Computer Science II 4
- COMP 2300 Discrete Structures in Computer Science 1-4
- COMP 2355 Intro to Systems Programming 4
- COMP 2370 Introduction to Algorithms & Data Structures 4
- COMP 2673 Introduction to Computer Science III 4
- COMP 2691 Introduction to Computer Organization 4
- COMP 3351 Programming Languages 4
- COMP 3361 Operating Systems I 4

**Electives**

Complete 20 credits of 3000-level computer science courses.  

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

**Total Credits**

56

---

1. COMP 2400 Software Tools may be used to satisfy four of the required 3000-level elective credits, but COMP 3904 Internship/Co-Op in Computing may not be used in this way.

---

**Minor Requirements**

20 credits, including the following:

- COMP 1671 Introduction to Computer Science I 4
- COMP 1672 Introduction to Computer Science II 4
- COMP 2673 Introduction to Computer Science III 4

**Students are encouraged to take:**

- COMP 2300 Discrete Structures in Computer Science 1-4
- COMP 2370 Introduction to Algorithms & Data Structures 4

**Total Credits**

20

---

Additional courses are subject to advance written approval by an advisor from the computer science faculty.

---

**Applied Computing**

The bachelor of arts in applied computing provides a quality education for the serious computer user. It complements the department’s bachelor of science in computer science by providing a program that combines collaboration with other departments and an applications-oriented emphasis. A prospective BA in applied computing major must satisfy all the requirements for the bachelor of arts degree as outlined in the University Undergraduate Bulletin.

This major was developed in consultation with the School of Art and Art History. A minor or double major in emergent digital practices and applied computing complement each other perfectly.

The bachelor of arts in applied computing would be ideal for students in graphics arts and electronic publishing and would provide an appropriate foundation for a student who wishes to pursue a career in the emerging field of education technology. A graduate with the BA in applied computing would be very attractive in the data processing unit of large financial, banking or insurance institutions, as a network or systems administrator in a similar firm or as a World Wide Web designer/programmer. Holders of the BA in applied computing degree would also be well suited to continue in any number of specialized master’s or certificate programs in fields as diverse as video and graphics production, fashion design, telecommunications, instructional technology or management information systems.

---

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

This major requires 45 credits of computer science or other approved computer applications and mathematics courses of which 25 credits must be at or above the 2000 level. Required courses are as follows:

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1671</td>
<td>Introduction to Computer Science I</td>
<td>12</td>
</tr>
<tr>
<td>&amp; COMP 1672</td>
<td>and Introduction to Computer Science II</td>
<td></td>
</tr>
<tr>
<td>&amp; COMP 2673</td>
<td>and Introduction to Computer Science III</td>
<td></td>
</tr>
</tbody>
</table>
Game Development

The game development programs are a joint effort by the University of Denver computer science, emergent digital practices and art programs. Specific degrees offered are

- bachelor of arts with a major in game development, and
- bachelor of science with a major in game development.

Graduates of these programs not only have solid computer science, graphics and game-programming skills, but also a strong foundation in art and/or the critical, technical and design aspects of digital media. To obtain this foundation, the major requires work in allied fields. Allied areas include studio art and emergent digital practices. The depth of allied knowledge is dependent on the degree (BA or BS) chosen.

The bachelor of arts in game development is a degree which prepares students to be capable of creating artistic content for games while having a strong technical background, enabling them to bridge the gap between artist and programmer. The BA requires a major in game development and a minor in emergent digital practices or art. A graduate of this program will be able to study and work as both a developer and an artist, which serves well in art, programming and game design.

The bachelor of science in game development is a combination of a computer science degree with a minor in mathematics, a second minor of your choice, and a cognate of five approved classes from art and emergent digital practices. This list of classes will be determined in collaboration with the Art department and the emergent digital practices program. In addition, both degrees require satisfying the University Common Curriculum requirements for BA and BS degrees. The BS requires two minors, one of which must be math for the game development major, and the BA requires one minor which is required to be either emergent digital practices or art.

This program provides a strong computer science and technical background, preparing students for all aspects of game programming, while providing them with (1) a foundation in art that includes both appreciation and understanding of the significance of art, with some ability to create art themselves, or (2) a foundation in the critical, technical and design foundations in emergent digital practices. Thus, graduates of this program are able to help in the programming and development of games, while understanding and being able to communicate effectively with the artists who are part of any game development project. The BS requires more mathematics and more required COMP classes than the BA and is balanced with fewer classes in the allied fields.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

52 credits, including the following:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1250</td>
<td>Drawing</td>
</tr>
<tr>
<td>COMP 1671</td>
<td>Introduction to Computer Science I</td>
</tr>
<tr>
<td>COMP 1672</td>
<td>Introduction to Computer Science II</td>
</tr>
<tr>
<td>COMP 2300</td>
<td>Discrete Structures in Computer Science</td>
</tr>
<tr>
<td>COMP 2355</td>
<td>Intro to Systems Programming</td>
</tr>
<tr>
<td>COMP 2370</td>
<td>Introduction to Algorithms &amp; Data Structures</td>
</tr>
<tr>
<td>COMP 2673</td>
<td>Introduction to Computer Science III</td>
</tr>
<tr>
<td>COMP 2821</td>
<td>Introductory Game Design</td>
</tr>
<tr>
<td>COMP 3821</td>
<td>Game Programming I</td>
</tr>
<tr>
<td>COMP 3831</td>
<td>Game Capstone I</td>
</tr>
<tr>
<td>COMP 3832</td>
<td>Game Capstone II</td>
</tr>
<tr>
<td>EDPX 3600</td>
<td>3D Modeling</td>
</tr>
</tbody>
</table>

Additional Electives

1 At most, 15 credits of approved computer applications courses can be applied from other University departments.
In addition, the BA requires a minor in emergent digital practices or art. See the following web pages for specifics of major requirements for the allied fields: emergent digital practices major (p. 145) or art major (p. 78).

**Bachelor of Science Major Requirements**

(183 credits required for the degree) (p. 40)

The following required classes compose the 80 credits:

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1671</td>
<td>Introduction to Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 1672</td>
<td>Introduction to Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2300</td>
<td>Discrete Structures in Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2355</td>
<td>Intro to Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2673</td>
<td>Introduction to Computer Science III</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3831</td>
<td>Game Capstone I</td>
<td>2</td>
</tr>
<tr>
<td>COMP 3832</td>
<td>Game Capstone II</td>
<td>2</td>
</tr>
<tr>
<td>COMP 2370</td>
<td>Introduction to Algorithms &amp; Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2691</td>
<td>Introduction to Computer Organization</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2821</td>
<td>Introductory Game Design</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3361</td>
<td>Operating Systems I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3801</td>
<td>Introduction Computer Graphics</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3821</td>
<td>Game Programming I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3822</td>
<td>Game Programming II</td>
<td>4</td>
</tr>
</tbody>
</table>

Five approved allied field classes from art and emergent digital practices

### Electives

3000-level computer science electives

### Total Credits

80

1. These courses can be combined with the second minor of the student’s choice. A non-exhaustive list of courses for the cognate can be found at the game development program’s website.

2. COMP 2400 Software Tools may be used to satisfy four of the required 3000-level elective credits, but COMP 3904 Internship/Co-Op in Computing may not be used in this way.

Under Construction

## Courses

**COMP 1101 Analytical Inquiry I (4 Credits)**

Students explore the use of mathematics and computer programming in creating animations. Students create animations on their laptop computers using animation software. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement.

**COMP 1571 Procedural Programming I (3 Credits)**

The C programming language is used to introduce fundamental procedural programming including engineering applications. Programming topics include an overview of computers and programming languages, variables and data types, arithmetic operators, input/output, comments, control structures, user-defined functions, scope, constants, file I/O, and pointers. Prerequisite: high school algebra.

**COMP 1572 Procedural Programming II (3 Credits)**

The Java programming language is used to introduce object-oriented programming. Topics include fundamental object-oriented concepts, class design and implementation, inheritance, polymorphism, exceptions, and event-driven programming. Prerequisite: COMP 1571.

**COMP 1670 Introduction to Computing (4 Credits)**

Overview of computing, including history and impact, use of computer as a tool in various disciplines, logical process of problem solving, and concepts of programming using a high-level language. Appropriate for students who wish to learn more about computers but are not planning to continue in computer science. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement.
COMP 1671 Introduction to Computer Science I (4 Credits)
Characteristics of modern computers and their applications; analysis and solution of problems; structure programming techniques; introduction to classes, abstract data types and object-oriented programming. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Prerequisite: high school algebra.

COMP 1672 Introduction to Computer Science II (4 Credits)
Advanced programming techniques; arrays, recursion, dynamic data structures, algorithm abstraction, object-oriented programming including inheritance and virtual functions. Prerequisite: COMP 1671.

COMP 1771 Introduction to Computer Science 1 - Honors (4 Credits)
This is an honors section of Introduction to Computer Science 1 meant for incoming freshman who are already experienced in computer programming. This course is meant to be faster paced than its counterpart COMP 1672/1671. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Prerequisite: AP credit in Java, at least one quarter of programming, or permission of instructor.

COMP 1991 Independent Study (1 Credit)
COMP 1992 Directed Study (1-10 Credits)

COMP 2300 Discrete Structures in Computer Science (1-4 Credits)
Number systems and basic number theory, propositional and predicate logic, proof techniques, mathematical induction, sets, counting and discrete probability, case studies with applications from computer science, such as data representation, algorithm analysis and correctness, and system design.

COMP 2355 Intro to Systems Programming (4 Credits)
The prerequisites for this class are a good understanding of imperative and object-oriented programming in Java. The prerequisites for this class include a good understanding of basic programming constructs, such as branches (if, switch), loops (for, while, do), exceptions (throw, catch), functions, objects, classes, packages, primitive types (int, float, boolean), arrays, arithmetic expressions and boolean operations. Computer organization is a parallel prerequisite; if possible, students should register for both this course and COMP 2691. You must have a good understanding of basic data structures such as arrays, lists, sets, trees, graphs and hash-tables. This is a class on systems programming with focus on the C programming language and UNIX APIs. There will be programming assignments designed to make you use various Debian GNU/Linux system APIs. Programming assignments involve writing code in C or C++. Prerequisite: COMP 2673.

COMP 2370 Introduction to Algorithms & Data Structures (4 Credits)
Performance analysis of algorithms; data structures and their physical storage representation; recursive techniques; stacks, queues, lists, trees, sets, graphs; sorting and searching algorithms. Prerequisites: MATH 2200 or COMP 2300 and COMP 2673.

COMP 2400 Software Tools (4 Credits)
Introduction to tools for program development and efficient use of a workstation environment. Topics include UNIX commands, emacs environment, X-windows, separate compilation of large projects, user-defined libraries, makefiles, intelligent debugging, perl, HTML, rcs/scss, tcl/tk and assorted additional topics. Prerequisite: COMP 2370 or instructor's permission.

COMP 2555 Principles of Computer Forensics (4 Credits)
Data recovery techniques, auditing methods and services, data seizure, preservation of computer evidence, reconstruction of events, and information warfare. Prerequisite: COMP 1672 or programming experience.

COMP 2673 Introduction to Computer Science III (4 Credits)
An introduction to several advanced topics in computer science. Topics vary from year to year and may include any of the following: theory of computing, cryptography, databases, computer graphics, graph theory, game theory, fractals, mathematical programming, wavelets, file compression, computational biology, genetic algorithms, neural networks, simulation and queuing theory, randomized algorithms, parallel computing, complexity analysis, numerical methods. Prerequisites: COMP 1672 or COMP 1771.

COMP 2671 Introduction to Computer Science I (4 Credits)
Characteristics of modern computers and their applications; analysis and solution of problems; structure programming techniques; introduction to classes, abstract data types and object-oriented programming. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Prerequisite: high school algebra.

COMP 2701 Topics in Computer Science (1-5 Credits)

COMP 2821 Introductory Game Design (4 Credits)
Learn the fundamental game design practices and how to transition from a design, to a prototype, to a final game. This course covers theory, design, 2D game art, and culminates in the creation of a (simple) 2D computer game. Prerequisites: COMP 1672 or COMP 1771 or DMST 2100.

COMP 2901 Computing and Society (4 Credits)
This course is designed to explore the social implications of computing practices, organization and experience. These topics and other issues are correlated with examples from the older and modern history of technology and science. Some formal experience with computing is assumed, but students who have a good familiarity with ordinary computing practice should be ready. Students are also expected to contribute their expertise in one or more of the areas of their special interest. Cross listed with DMST 3901.

COMP 2992 Directed Study (1-10 Credits)

COMP 3000 Seminar: The Real World (1 Credit)
Series of lectures by alumni and others on surviving culture shock when leaving the University and entering the job world. Open to all students regardless of major. Cross listed with MATH 3000.
COMP 3200 Discrete Structures (4 Credits)
Discrete mathematical structures and non-numerical algorithms; graph theory, elements of probability, propositional calculus, Boolean algebras; emphasis on applications to computer science. Cross-listed as MATH 3200. Prerequisites: MATH 2200 or COMP 2300 and COMP 1672 or COMP 1771.

COMP 3341 Multimedia Systems (4 Credits)
This course covers fundamental issues in design and implementation of multimedia applications. This course also covers technologies in multimedia systems such as multimedia data representation, compression, coding, networking, data management, and I/O technologies. Prerequisite: COMP 3361.

COMP 3351 Programming Languages (4 Credits)
Programming language as a component of software development environment; binding, scope, lifetime, value and type of a variable; run-time structure--static, stack-based and dynamic languages; parameter passing--call by reference, value, result, value-result and name; subprogram parameters; role played by side effects, dangling pointers, aliases and garbage; garbage collection; data abstraction - study of object-oriented, functional, and logic languages. Prerequisites: COMP 2370, COMP 2691, and COMP 2355.

COMP 3353 Compiler Construction (4 Credits)
Design and implementation of a major piece of software relevant to compilers. Prerequisite: COMP 3352.

COMP 3361 Operating Systems I (4 Credits)
Operating systems functions and concepts; processes, process communication, synchronization; processor allocation, memory management in multiprogramming, time sharing systems. Prerequisites: COMP 2355, COMP 2370, and COMP 2691.

COMP 3371 Advanced Data Structures & Algorithms (4 Credits)
Design and analysis of algorithms; asymptotic complexity, recurrence equations, lower bounds; algorithm design techniques such as incremental, divide and conquer, dynamic programming, randomization, greedy algorithms, etc. Prerequisites: COMP 2370, MATH 3200.

COMP 3381 Software Engineering I (4 Credits)
An introduction to software engineering. Topics include software processes, requirements, design, development, validation and verification and project management. Cross listed with COMP 4381. Prerequisite: COMP 2370.

COMP 3382 Software Engineering II (4 Credits)
Continuation of COMP 3381. Topics include component-based software engineering, model-driven architecture, and service-oriented architecture. Prerequisite: COMP 3381.

COMP 3400 Advanced Unix Tools (4 Credits)
Design principles for tools used in a UNIX environment. Students gain experience building tools by studying the public domain versions of standard UNIX tools and tool- building facilities. Prerequisites: COMP 2400 and knowledge of C and csh (or another shell), and familiarity with UNIX.

COMP 3410 World Wide Web Programming (4 Credits)
Creating WWW pages with HTML, accessing user-written programs via CGI scripts, creating forms, imagemaps and tables, and Java programming principles and techniques. Prerequisite: COMP 2355.

COMP 3421 Database Organization & Management I (4 Credits)
An introductory class in databases explaining what a database is and how to use one. Topics include database design, ER modeling, database normalization, relational algebra, SQL, physical organization of records and clocks, heap files, sorted files, hashing, extendible hashing, linear hashing and B trees. Each student will design, load, query and update a nontrivial database using the Oracle DMBS. Prerequisite: COMP 2370.

COMP 3501 Introduction to Artificial Intelligence (4 Credits)
Programming in LISP and Prolog with applications to artificial intelligence; fundamental concepts of artificial intelligence; emphasis on general problem-solving techniques including state-space representation, production systems, and search techniques. Prerequisites: MATH 2200, COMP 2370.

COMP 3621 Computer Networking (4 Credits)
An introduction to computer networks with an emphasis on Internet protocols. Topics include; network topologies, routing, Ethernet, Internet protocol, sockets, operating system impact and client/server implementations. Prerequisites: COMP 2355 and COMP 2370. Corequisite: COMP 3361.

COMP 3701 Topics in Computer Graphics (4 Credits)
COMP 3702 Topics in Database (4 Credits)
COMP 3703 Topics-Artificial Intelligence (4 Credits)
COMP 3704 Advanced Topics: Systems (4 Credits)
COMP 3705 Topics in Computer Science (1-4 Credits)
COMP 3721 Computer Security (4 Credits)
This course gives students an overview of computer security along with some cryptography. Some network security concepts are also included. Other concepts include coverage of risks and vulnerabilities, policy formation, controls and protection methods, role-based access controls, database security, authentication technologies, host-based and network-based security issues. Prerequisite: COMP 3361.

COMP 3801 Introduction Computer Graphics (4 Credits)
Fundamentals of graphics hardware, scan conversion algorithms, 2D and 3D viewing transformations, windows, viewports, clipping algorithms, mathematics for computer graphics, graphics programming using a standard API. Prerequisites: COMP 2370, MATH 1952 or 1962, and MATH 2060.
COMP 3821 Game Programming I (4 Credits)
An introduction to computer game programming. Use of a game engine to create 3D computer games. Topics to include game scripting, simple 3D asset creation, incorporation of assets, keyboard/mouse event handling, animation, game phases and score keeping. Prerequisite: COMP 2370.

COMP 3822 Game Programming II (4 Credits)
An introduction to computer game engine programming. Major class goal is to understand how game engines are created by building subsets of a game engine. Non-exhaustive set of topics include how terrains are generated, how animations are supported, how particle systems are implemented, how physics systems are coded, and how support is provided for higher level scripting languages. All coding will be done in low-level graphics languages. Prerequisites: COMP 3801 and COMP 3821.

COMP 3831 Game Capstone I (2-4 Credits)
Students design, build, test and debug a fully working game from scratch. Both art and programming are developed by the student teams with the instructor acting as a project manager to ensure that goals are met through the 10-week development process through various milestones. In addition to building the game, students alter their game design document to add new features, making corrections to prior design issues, and focus on making the game playable and "fun." Prerequisite: COMP 3821.

COMP 3832 Game Capstone II (2-4 Credits)
Students design, build, test and debug their existing game from Game Capstone I. Both art and programming are developed by the student teams with the instructor acting as a project manager to ensure that goals are met through the 10-week development process through various milestones. In addition to building the game, students alter their game design document to add new features, making corrections to prior design issues, and focus on making the game playable and "fun." Prerequisite: COMP 3831.

COMP 3833 Game Capstone III (2-4 Credits)
Students design, build, test and debug their working game from Game Capstone II. Both art and programming are developed by the student teams with the instructor acting as a project manager to ensure that goals are met through the 10-week development process through various milestones. In addition to building the game, students modify their design document and implement changes in their game, create new concept art for the features, build an introduction level into their game, test the game with "Play testers", and focus on creating a game that is "fun" to play. By the end of the quarter, their game is ready for distribution on an appropriate platform. Prerequisite: COMP 3832.

COMP 3904 Internship/Co-Op in Computing (0-10 Credits)
Practical experience in designing, writing and/or maintaining substantial computer programs under supervision of staff of University Computing and Information Resources Center. Prerequisites: COMP 2370 and approval of internship committee (see department office).

COMP 3991 Independent Study (1-10 Credits)
Cannot be arranged for any course that appears in the regular course schedule for that particular year.

COMP 3992 Directed Study (1-10 Credits)

COMP 3995 Independent Research (1-10 Credits)

Department of Economics
Office: Sturm Hall, Room 246
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2685
Email: econ04@du.edu
Web Site: http://www.du.edu/ahss/economics

Economics is the study of the production and distribution of material wealth. This study offers an understanding of the institutions—and their historical evolution—that govern production and distribution at the national and global levels. Economics also analyzes how and why these institutions function well or badly in part and in whole, including an examination of how individual markets for products, workers and finance work. Students learn theories of business cycles and economic structural changes. They investigate the choices and consequences of government policy alternatives. The economics program prepares students for a variety of careers in business, banking, government and teaching. Economists hold positions in private industry and government as international advisors or consultants. Economics is a strong major for students interested in pursuing advanced degrees in law, business, political science and, of course, economics.

Economics

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)

42 credits, including the following:

- ECON 1020 Introduction to Micro- and Macroeconomics I: History and Theories 4
- ECON 1030 Introduction to Micro- and Macroeconomics II: Theories and Policies 4
- ECON 2020 Intermediate Microeconomics 4
**Secondary Major**

42 credits. Same requirements as for the BA degree.

**Minor Requirements**

20 credits, including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1020</td>
<td>Introduction to Micro- and Macroeconomics I: History and Theories</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1030</td>
<td>Introduction to Micro- and Macroeconomics II: Theories and Policies</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2020</td>
<td>Intermediate Microeconomics</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 2030</td>
<td>Intermediate Macroeconomics</td>
<td>4</td>
</tr>
</tbody>
</table>

At least 2 upper-division courses (2000 or 3000 level) 8

**Total Credits**

20

**Courses**

**ECON 1020 Introduction to Micro- and Macroeconomics I: History and Theories (4 Credits)**

This course presents an introductory analysis of how the economic aspects of our society operate. We begin with a brief examination of the development of human economic arrangements and how these developed into the kind of economy we have today. We then look at some of the historical development of how people thought that economic activity works and how they thought it should work. Then we go into an examination of the workings of markets and economic competition--what we call micro-economics--by examining some of the relevant theory as well as its embodiment in developments in the U.S. economy. Following that, we examine in much more detail the theory and some current issues involved in what we call macro-economics--the study of the workings of the national economy as a whole, with its concerns to explain such matters as the national rates of unemployment and price inflation, along with a study of the monetary and financial aspects of the economy and the promises and problems of gender from many different directions. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**ECON 1030 Introduction to Micro- and Macroeconomics II: Theories and Policies (4 Credits)**

Examination of how markets work and the process of competition; public policy toward markets; antitrust, regulation, deregulation, public enterprise vs. privatization, etc.; distribution of income, labor-management and management-ownership-finance relations; impact of macroeconomic and international issues and policies on business, labor and consumers. Prerequisite: ECON 1020.

**ECON 1992 Directed Study (1-10 Credits)**

**ECON 2020 Intermediate Microeconomics (4 Credits)**

Microeconomic foundations to determine prices and production; consumer behavior, the behavior of firms in competitive and imperfectly competitive markets, and factor markets. Prerequisite: ECON 1030.

**ECON 2030 Intermediate Macroeconomics (4 Credits)**

Determinants of aggregate levels of production, employment and prices, focusing on the short-run dynamics of an economy consisting of a complex structure of interrelated markets; includes analysis of investment decisions, monetary structures and labor markets. Prerequisite: ECON 1030.

**ECON 2050 History of Economic Thought (4 Credits)**

Development of economic thought; leading writers and schools, their influence and theories. Prerequisite: ECON 1030.

**ECON 2150 Cost Benefit Analysis (4 Credits)**

This course explores the methodology of cost-benefit in applied policy analysis of health, safety, and environmental regulations. Students explore the economic reasoning, and financial/quantitative tools, used in CBA to identify, quantify, and summarize positive and negative effects of public policy decisions. Prerequisite: ECON 1030.
ECON 2180 Experimental Economics (4 Credits)
Economics courses covering mainstream theories are often based upon a priori reasoning, which is in turn built upon certain assumptions about individual optimizing behavior. This course introduces students to the new and expanding field of experimental economics. Instead of taking the mainstream assumptions and conclusions for granted, we critically examine individuals’ economic behavior and their ‘social’ consequences in various experimental settings. We review the historical development of experiments and then cover specific topics that experiments have been designed to investigate. The course has a heavy lab focus, with students themselves participating in simulations of most of the experiments discussed. Topics include market functioning, public goods and open access environmental resources, fairness and equity, and individual decision-making. Students are encouraged to think about empirical and policy implications highlighted by both experiments and economic theory. Students also gain an understanding of the scientific methodology required to create controlled experiments. Prerequisite: ECON 1030.

ECON 2280 Gender in the Economy (4 Credits)
This course moves beyond the traditionally male-dominated view of the economy to explore economic life through a gendered lens. A gendered perspective challenges us to see economic theory, markets, work, development, and policy in new ways. Gendered economic analysis expands the focus of economics from strictly wants, scarcity, and choice to include needs, abundance, and social provisioning in its scope. Cross listed with GWST 2280. Prerequisite: ECON 1020.

ECON 2300 Comparative Economic Systems (4 Credits)
The purpose of this course is to develop an understanding of the methods (both theoretical and empirical) used to compare economic systems around the world. As a learning objective, by the end of the course students should be able to explain the differences between economic, financial, and legal institutions, policies, and economic performance in alternative economic systems and to critically evaluate changes occurring in transition economies (particularly China, Russia, and Central and Eastern Europe) and their implications for economic growth. Prerequisite: ECON 1030.

ECON 2330 China and the Global Economy (4 Credits)
This course provides a comprehensive overview of the Chinese economy and China's role in the global economy. The course covers the economic interactions between China and the world economy over the past two centuries, evaluates ongoing social, economic and environmental challenges, and evaluates future development possibilities for China and the global economy as a whole. The topics addressed include: the Chinese economy before 1949; the socialist era, 1949-1978; economic reform and market transition; the role of state enterprises; foreign investment; foreign trade; China's role in the global imbalances; the impact of the recent global economic crisis. Prerequisite: ECON 1030.

ECON 2400 Public Finance (4 Credits)
Public-sector economics, including public finance and expenditures; effects of different types of taxes and various government programs; government budgeting; cost benefit analysis. Prerequisite: ECON 1030.

ECON 2410 Industrial Organization Economics (4 Credits)
This course explores some applied topics in microeconomic theory such as innovation and technological change; cost of production and decision making by firms; market structures and competition; labor market; the changing role of the state; antitrust; regulation and deregulation; and international trade. Prerequisite: ECON 1030.

ECON 2500 Economic Development (4 Credits)
This course introduces the student to several dimensions of, and forces pertaining to, development processes, including nature's inequalities, colonial legacies, the role and limitations of primary production, labor utilization, industrialization, trade, technology acquisition, foreign direct investment and other forms of capital flow, and the role of the state. If time permits, discussion include environmental concerns and cultural factors. Prerequisite: ECON 1030.

ECON 2510 The Asian Economies (4 Credits)
This course is based on a comparative approach, examining several Asian economies' colonial background, their primary producing sectors, the developmental state in these countries, attempts at industrialization, trade policies, technological development, liberalization to attract foreign capital, currency and financial crises. Prerequisite: ECON 1030.

ECON 2590 Regional Economics of Metro Denver (4 Credits)
This course covers theories of regional economic development and applies these theories to the economy of the Denver metro region. The course is divided into three main parts. The first part examines the historical process of regional development in the United States along with the development of American regional policy. This section discusses the economic history of the Denver metro area by relating it to regional development trends in the U.S. as a whole. The second part covers theories of regional development and discuss how these relate to the economic history of the Denver metro area. The third part is an in-depth look at the current structure of the Denver metro economy, the influence of state and federal policies, and its prospects for future development. Prerequisite: ECON 1030.

ECON 2610 International Economics (4 Credits)
The student learns about balance of payments, accounting, international monetary arrangements, international trade, and international investment. Certain policies that have a direct impact on a country's balance of payments, e.g. macroeconomic policies, exchange rate policy, and commercial policies, are examined. Some features of recent US trade policy stances is also be surveyed. Prerequisite: ECON 1030.

ECON 2670 Quantitative Methods (4 Credits)
This course offers an introduction to empirical work and statistics relevant to the study of economics. The course begins with a discussion of the use and creation of data, and various sources of data. It then presents the basic foundations of statistical methods for the description and analysis of data. Students learn how to calculate common descriptive statistics, test hypotheses related to the mean and differences between means, and how to perform and interpret bivariate linear regression analysis. In the process, students learn and use a popular software package commonly used for statistical analysis in economics. Prerequisite: ECON 1030.
ECON 2710 Labor Economics (4 Credits)
Labor theory and institutions; theory of labor demand and supply including market models, demographics and education; the labor movement and legislation, industrial conciliation methods, and modern industrial relations. Prerequisite: ECON 1030.

ECON 2810 Environmental and Natural Resource Economics (4 Credits)
Prerequisite: ECON 1030.

ECON 2992 Directed Study (1-10 Credits)

ECON 3040 Marxian Political Economy (4 Credits)
An exposition of Marx's theory of value through a detailed reading of Capital, vol. I. Excerpts from other readings by Marx, and some of the relevant secondary literature used. Restriction: junior standing. Prerequisite: ECON 2020 or ECON 2030.

ECON 3075 Marxism (4 Credits)
This course is a survey in the theoretical and political work influenced by the writings of 19th century philosopher and economist, Karl Marx. The course covers both the historical traditions in Marxism in the 19th, 20th, and 21st century as well as the geographical traditions of these time periods in France, Germany, England, Italy, Russia, China, and America. It is not necessary that students have a prior background in Marx's work, but it is highly recommended. Requires junior standing or above. Cross listed with PHIL 3075.

ECON 3110 European Economic History (4 Credits)
The emergence of capitalism from feudal society; the Industrial Revolution, English capitalism; European industrialization; state and economy in capitalism; 20th-century Europe and the global economy. Restriction: junior standing. Prerequisite: ECON 2020 or ECON 2030.

ECON 3120 Economic History of the U.S. (4 Credits)
Industrial progress from colonial period to the present time; influence of economic forces in social and political development. Restriction: junior standing. Prerequisite: ECON 2020 or ECON 2030.

ECON 3460 Monetary Theory and Policy (4 Credits)
Studies the interaction between money and the economy. Examines the workings of the financial institutions and how they affect the economy. Looks at the questions of what serves as money, what determines interest rates, and how the central bank conducts monetary policy and its effect on the performance of the economy. Restriction: junior standing. Prerequisite: ECON 2030.

ECON 3480 Money & Financial Markets (4 Credits)
Examines workings of the money and financial markets and their relation to the monetary system and to the macroeconomy. Restriction: junior standing. Prerequisite: ECON 2020 or ECON 2030.

ECON 3500 Economic Development (4 Credits)
Careful re-examination of the works of the prominent development economists of the immediate postwar decades to critically shed light on the treatment of topical development problems by modern economists. Restriction: junior standing. Prerequisite: ECON 2020 or 2030.

ECON 3590 Urban Economics (4 Credits)
Covers topics and issues of economic growth and decline in metropolitan areas, emphasizing urban economic issues. A broad range of policy areas is discussed, including labor market policy, welfare reform, housing policy, racial segregation, transportation, and environmental policy, among others. Restriction: junior standing. Prerequisite: ECON 2020 or 2030.

ECON 3600 International Monetary Relations (4 Credits)
Theory, policy, and history of international organization of money and finance; open-economy macroeconomics: balance of payments, exchange rate dynamics, monetary policy effectiveness. Cross-listed with INTS 3600. Restriction: junior standing. Prerequisite: ECON 2030.

ECON 3610 International Trade Theory & Policy (4 Credits)
Examines topical trade issues confronting the United States, policies proposed to tackle them, and the theoretical underpinnings of these policies. Studies how those policies could affect the less developed countries as determined by the environment established under the World Trade Organization. Prerequisite: ECON 2020 or 2030. Recommended: ECON 2610.

ECON 3620 Philosophical Perspectives on Economics and Social Sciences (4 Credits)
This course provides an advanced survey of conceptual and methodological issues that lie at the intersection of philosophy, economics, and the social sciences. More specifically, the main goal is to engage in a critical discussion of how sciences such as psychology, sociology, and neuroscience can challenge and modify the foundations and methodology of economic theories. The course is structured around three broad modules. After a brief introduction, we begin by discussing the emergence of rational choice theory which constitutes the foundation of classical and neoclassical economics and present some paradoxical implications of expected utility theory. The second module focuses on the relationship between economics and psychology. More specifically, we examine the emergence of behavioral economics, the study of the social, cognitive, and emotional factors on the economic decisions of individuals and institutions and their consequences for market prices, returns, and resource allocation. Finally, the third module focuses on the implications of neuroscience on decision making. We discuss some recent developments in neuroeconomics, a field of study emerged over the last few decades which seeks to ground economic theory in the study of neural mechanisms which are expressed mathematically and make behavioral predictions.
ECON 3670 Econometrics: Multivariate Regression Analysis for Economists (4 Credits)
This course develops the foundations of ordinary least squares (OLS) regression analysis and teaches students how to specify, estimate, and interpret multivariate regression models. Students have to apply what they have learned using a popular software package used for econometrics and real data. Special topics also covered include regression models that include dummy variables, log-linear models, fixed effects models, a brief discussion of instrumental variables, and an introduction to time-series analysis and forecasting. Prerequisites: ECON 2670 and either ECON 2020 or ECON 2030. Restriction: junior standing.

ECON 3740 Health Economics (4 Credits)
This course is designed to study the nature of the organization of health care production, delivery and utilization according to economic theory. It introduces the up-to-date problems and issues in the U.S. health care system by studying demand for and supply of health care services, health care production and costs, and market analysis of health care industry. Important parties playing roles in health care industry such as private health insurance firms, physicians, pharmaceutical industry, and hospital services will be studied in detail. In addition, the course deals with the role of government in health care industry and various health care reforms proposed in the U.S. Restriction: junior standing. Prerequisite: ECON 2020 or 2030.

ECON 3830 Topics in Macroeconomics (4 Credits)
Coverage varies but may include advanced topics in monetary theory, the study of business cycles, or the works of important monetary and macroeconomic theorists. Restriction: junior standing. Prerequisite: ECON 2030.

ECON 3850 Mathematics for Economists (4 Credits)
Restriction: junior standing. Prerequisite: ECON 2020 and 2670.

ECON 3900 Growth, Technology and Economic Policy (4 Credits)
This course will introduce students to the important issues related to technological change and how it relates to economic growth. The lectures seek to explain how technology and innovation determine growth and development with special emphasis on learning-by-doing, organizational capability, appropriation and spillover effects. The core topics that will be covered include: (1) origins of new technology and its market introduction, (2) the process of technological adoption and advancement, (3) the dissemination of technology and innovations within and cross firms, industries and countries, (4) the impacts of technological change, including benefits and costs, on individual and society at large and (5) policy implications to promote innovation and to reduce its negative effects. The rest of the course will focus on the relationship of technological change to human development, social welfare, as well as prior experiences of industrialized economies and emerging economies. Prerequisites: ECON 2020 and junior standing.

ECON 3970 Environmental Economics (4 Credits)
This course examines economic perspectives of environmental and resource problems, ranging from peak oil, food crisis, and climate change. Topics include the property-rights basis of polluting problems, environmental ethics, benefit-cost analysis, regulatory policy, incentive-based regulation, clean technology, population growth and consumption, and sustainable development. Restriction: junior standing. Prerequisite: ECON 2020.

ECON 3991 Independent Study (1-8 Credits)
Prerequisites: ECON 1030.

ECON 3992 Directed Study (1-10 Credits)

ECON 3995 Independent Research (1-4 Credits)
This research project is based on a topic that the student picks in consultation with the chair of the economics department. During the consultation process a faculty supervisor is assigned to work with the student throughout the research process. The topic is preferably one that requires the student to demonstrate her/his ability to apply what he/she has learned in the intermediate-level required courses for the economics major. Restriction: senior standing.

ECON 3996 Senior Paper Research (2-4 Credits)
This research project is based on a topic that the student picks in consultation with the chair of the economics department. During the consultation process a faculty supervisor will be assigned to work with the student throughout the research process. The topic is preferably one that requires the student to demonstrate her/his ability to apply what she/he has learned in the intermediate-level required courses for the economics major. Restriction: senior standing.

ECON 3997 Economics Honors Thesis (4 Credits)
Students pursuing Departmental Distinction will write an Economics Honors Thesis of between 30 and 50 pages during their senior year. The subject of the Thesis must concern some important topic in Economics, the precise nature of which will be determined by the student and an advisor chosen from among the Economics faculty. A student wanting to try for this Distinction must first meet with the Department Chair to discuss which Professor he or she will request to supervise his or her Thesis. The Professor who agrees to supervise an Honors Thesis is responsible for certifying that the work is of sufficient quality for Departmental Distinction in Economics.

Emergent Digital Practices

Office: Sturm Hall, Room 216
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-7716
Email: edp@du.edu
Web Site: http://www.du.edu/ahss/edp
Emergent Digital Practices (EDP) provides undergraduate students with a broad understanding of the history, theory and emerging status of multiple cultural practices, both mainstream and alternative, developing alongside digital technologies. The EDP major emphasizes the new forms of interaction, collaboration, engagement, and performance developing as technology converges with bodies of knowledge and practices from across the arts, humanities, and sciences. Shaped by an investment in participatory forms of creativity and critical engagement, EDP asks students to work together to develop strategies and processes for addressing complex interdisciplinary topics and problems beyond the realm of industry standards and proven application. Together, EDP faculty and students will strive to pioneer new forms of art, experiences, media, and ways of knowing in the 21st century.

The Emergent Digital Practices program brings together art, design, media, culture, and technology studies in a hands-on, collaborative environment. Technology links academic disciplines with professional fields and joins shared communities with our personal lives in many new and exciting ways. To understand and explore this landscape, we infuse the digital practices of making and writing with contemporary critical approaches to cultural technologies, media philosophy, the critique and investigation of electronic and new media arts, and studies in science fiction, trans-global politics and science.

Emergent Digital Practices appeals to students who are more broadly defined creative types and critical thinkers because the lines between artists, designers, scholars, and inventors have largely dissolved. The EDP program prepares students who seek to work in spaces beyond what is already defined and familiar. To help students acquire a broad spectrum of media literacies and practical artistic skills, the EDP major combines cutting-edge classrooms with new learning spaces that are equal parts laboratory, studio, think-tank, and stage. Integrating powerful desktop computer stations and highly mobile technologies within a variety of interactive smart-spaces, the EDP program supports new kinds of student-to-peer and student-to-faculty interactions and collaborations.

**Emergent Digital Practices**

The Bachelor of Arts in Emergent Digital Practices at the University of Denver promotes critical knowledge and creation with digital tools. The BA student majoring in emergent digital practices should be able to demonstrate both understanding and skills within interdisciplinary contexts. The BA student should also be able to synthesize ideas and practices from across the spectrum of historical and contemporary contexts, focusing not just on making the new, but making the needed. The BA student’s work should demonstrate synergy with the student’s second major, minor or dual-degree program.

The Emergent Digital Practices Minor brings the power of basic technical know-how and critical sensibility to your major. The BA minor will be able to leverage digital ideas to infuse 21st-century methodologies into their other areas of interest, better preparing the student for either the marketplace or future academic studies in any discipline. Through both exploration of new ideas and hands-on experiences, the minor will prepare students to shift with our rapidly changing future.

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

60 credits, including the following:

<table>
<thead>
<tr>
<th>EDP Foundations</th>
<th>ARTS 1250</th>
<th>Drawing</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1250</td>
<td>EDPX 2000</td>
<td>Imaging in Emergent Digital Practices</td>
<td>4</td>
</tr>
<tr>
<td>EDPX 2000</td>
<td>EDPX 2100</td>
<td>Coding in Emergent Digital Practices</td>
<td>4</td>
</tr>
<tr>
<td>EDPX 2100</td>
<td>EDPX 2200</td>
<td>Cultures in Emergent Digital Practices</td>
<td>4</td>
</tr>
<tr>
<td>EDPX 2200</td>
<td>EDPX 2300</td>
<td>Systems in Emergent Digital Practices</td>
<td>4</td>
</tr>
<tr>
<td>EDPX 2300</td>
<td>EDPX 2400</td>
<td>Time in Emergent Digital Practices</td>
<td>4</td>
</tr>
<tr>
<td>EDPX 2400</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| EDP Cultures |
| Select 4 credits of EDP cultures |
| 4 |

Upper-division EDP electives 24

| Capstone Credits |
| EDPX 3950 | Collaboration and Production (Taken in the Spring of Junior Year) | 4 |
| EDPX 3990 | Capstone (Taken in the Winter of Senior Year) | 4 |

**Total Credits** 60

The BA major in Emergent Digital Practices must also have a minor, a second major, or be enrolled in a dual-degree program in another discipline. To facilitate this requirement, the BA major in Emergent Digital Practices is capped at a maximum of 60 credits toward the major.

**Secondary Major**

60 credits. Same requirements as for BA degree.
Minor Requirements

24 credits, including the following:

**Required Courses**
EDPX 2200  Cultures in Emergent Digital Practices  4

**EDP Foundations**
Select 3 of the following:
- EDPX 2000  Imaging in Emergent Digital Practices  4
- EDPX 2100  Coding in Emergent Digital Practices  4
- EDPX 2300  Systems in Emergent Digital Practices  4
- EDPX 2400  Time in Emergent Digital Practices  4

**EDP electives**  8
**Total Credits**  24

Minor Requirements (for Bachelor of Arts in Game Development)

24 credits, in emergent digital practices. These requirements apply only to students pursuing a bachelor of arts in game development.

**Required Courses**
EDPX 2000  Imaging in Emergent Digital Practices  4
EDPX 2200  Cultures in Emergent Digital Practices  4
EDPX 2400  Time in Emergent Digital Practices  4

**EDP electives**  12
**Total Credits**  24

* Bachelor of arts in game development students with a minor in emergent digital practices:
  - cannot receive credit toward the minor for either EDPX 2100 or EDPX 2300
  - may need to seek prerequisite waivers to enroll in EDPX 3100, 3200, 3450, 3110, 3250, 3310, 3340, 3350
  - may not count EDPX 3600 3D Modeling or ARTS 1250 Drawing toward satisfying the emergent digital practices minor as they are required cognates of the game development major

Bachelor of Fine Arts Major Requirements

(189-192 credits required) (p. 38)

The Bachelor of Fine Arts in Emergent Digital Practices at the University of Denver builds on the same foundation as the BA and extends into a fine arts-focused practice. While demonstrating a foundational understanding of emergent digital practices within interdisciplinary contexts, the BFA student should be able to articulate a deeper understanding of the historical and contemporary contexts of art, technology and sciences. The BFA student should be prepared for public engagement through his or her knowledge of the significance of established cultural institutions and frameworks such as galleries, museums, festivals and other public spaces. Additionally the BFA student should be prepared for the development and organization of emerging venues for the exhibition and public engagement with experimental works of art and digital media. The BFA student does not need a second major or minor.

Minimum of 116 credits; maximum of 135 credits, including the following:

**EDP Foundations**
ARTS 1250  Drawing  4
EDPX 2000  Imaging in Emergent Digital Practices  4
EDPX 2100  Coding in Emergent Digital Practices  4
EDPX 2200  Cultures in Emergent Digital Practices  4
EDPX 2300  Systems in Emergent Digital Practices  4
EDPX 2400  Time in Emergent Digital Practices  4

**EDP Cultures**
Select 4 credits of EDP cultures

**Art history**
Select 8 credits of Art History

**Credits outside Emergent Digital Practices and Art History**
4 credits in a course approved by an EDP advisor

**Upper division EDP electives**
EDPX 3110 Rapid Game Design and Prototyping (4 Credits)
This course is a rigorous investigation into games, rules, systems, interaction, and the iterative design methodology through the rapid creation of paper-based and physical game prototypes. The ambition is for each student to create one new game per week in response to varying material and conceptual constraints. Participants both create and constructively critique games created by classmates. Participants are expected to become reflective in their play. Class time is devoted to play-testing and discussion. Lab fee. Cross listed with EDPX 4110. Prerequisite: EDPX 2300 or permission of the instructor.
EDPX 3112 Rapid Physical Game Design & Prototyping (4 Credits)
This course is a rigorous investigation into games, rules, systems, interaction, collaboration, and the iterative design methodology through the rapid creation of large, human-scale, “Big Games.” The ambition is for students, working in changing collaborative groupings, to rapidly create games in response to varying material and conceptual constraints. Participants will both create and constructively critique games created by classmates. Participants are expected to become reflective in their play. Class time will be devoted to play-testing and discussion. Prerequisite: EDPX 2300. Lab fee.

EDPX 3120 Making Critical Games (4 Credits)
Students are challenged to create games (board, physical, video-, and hybrid games) that respond to social conditions in a critical manner while still maintaining an essential ludic quality. Public good and civic engagement projects are welcomed. The course may be repeated with instructor permission when projects vary. Lab fee. Prerequisites: EDPX 3100 or COMP 1671, and EDPX 3110, or permission of the instructor. Cross listed with EDPX 4120.

EDPX 3200 Data Visualization (4 Credits)
This course explores the creation of informational graphics for the visual unpacking of relationships within and among data sets. Students learn to visualize large data sets as a means of revealing and exploring patterns of information. Creating interactive visualizations are also covered, allowing for deep and participatory engagement with information. The resulting mediums include print and web. Lab fee. Cross listed with EDPX 4200. Prerequisites: EDPX 2000 and EDPX 2100, or permission of the instructor.

EDPX 3210 Typographic Landscapes (4 Credits)
This class is a rigorous investigation of the expressive potential of typography as a crucial element of visual expression and electronic media. This class presumes no background in typography. Students are guided through project-based explorations that range from hand-rendered inter-letter spatial relationships to the typesetting of modest sets of pages for paper and e-books. Lab fee. Prerequisite: EDPX 2000 or permission of the instructor.

EDPX 3250 Making Networks (4 Credits)
This course provides students with the skills necessary to establish network presence across a range of platforms and technologies. Current web technologies and standards are covered but an emphasis is placed on identifying emerging platforms and developing innovative methodologies for critical engagement with emergent digital practices. Technologies studied may include content management and delivery systems, web APIs, big data, digital mapping platforms, data visualization, augmented reality and locative media. Prerequisite: EDPX 2300 or instructor permission. Lab fee. Crosslisted with EDPX 4250.

EDPX 3270 Making Networked Art (4 Credits)
In this course networked art is understood in the broadest sense from art that natively exists on digital networks to art that critiques and engages with the concept of the network in contemporary society. This course aims to develop a critical understanding of and response to the social, cultural, aesthetic and technical contexts of network culture, building on a deep understanding of contemporary and historical networked art practices. Students will engage with network architectures and platforms developing experimental approaches to user interface and interaction, deploying a range of digital materials from data to rich multimedia content to create work that produces new understandings of the role of the network in a post digital age. Prerequisite: EDPX 2400 and EDPX 3250, or permission of the instructor. Lab fee. Crosslisted with EDPX 4270.

EDPX 3310 Tangible Interactivity (4 Credits)
Explores methods and devices for human-computer interaction beyond the mouse and keyboard. Students learn to create and hack electronic input and output devices and explore multi-touch augmented reality, and other forms of sensor-based technologies. Lab fee. Prerequisite: EDPX 2300 or permission of the instructor.

EDPX 3320 Interactive Art (4 Credits)
This course expands the concepts, aesthetics, and techniques critical to the exploration and authoring of interactive art. It explores human computer interactions; user/audience interface design/development; interactive logic, author-audience dialogue; meta data/multimedia asset acquisition and authoring environments. While utilizing student skills in numerous media forms, the class focuses on sensing, interactive scripting techniques, and emerging forms of digital narrative. Emphasis is on the development of interactive media deployment and distributions ranging from screen media to physical environments. Lab fee. Cross listed with EDPX 4320. Prerequisite: EDPX 3310 or EDPX 3450, or permissions of the instructor.

EDPX 3340 Designing Social Good (4 Credits)
This course focuses on interdisciplinary approaches to artistic, scholarly and cultural methods for creating change in contemporary societal mindsets for a more sustainable and equitable future. Our objectives are to understand how current practices are reinforced and then to make experiences that encourage new ideas in the personal and global sphere. Lab fee. Cross-listed with EDPX 4340. Prerequisite: EDPX 2300 or permission of the instructor.

EDPX 3350 Sustainable Design (4 Credits)
This course surveys and functionally implements the foundations of sustainable design strategies as a praxis intersecting the domains of digital media design, dissemination, community organization and networking. The course builds upon the basic paradigms that have coalesced in the organizational and critical platforms of the sustainable design movement including ecology/environment, economy/employment, equity/equality and education/ pedagogy/dissemination. The class reviews a wide spectrum of sustainable design strategies including: mapping of consumptive origin-thru-fate, green materials usage, creative commons, open source software/hardware movements, collaborative design, predictive complexity modeling, biomimicry, evolutionary design methods, and greening infrastructure among others. Lab fee. Prerequisites: EDPX 2300 and EDPX 2400 or permission of instructor.

EDPX 3400 Video Art (4 Credits)
This course continues the investigation of theories and practice of electronic media and expands into an exploration of video art, providing the basic principles of video technology and independent video production through a cooperative, hands-on approach utilizing small format video. Lab fee. Prerequisite: EDPX 2400 or permission of the instructor. Cross listed with EDPX 4400.
EDPX 3410 Advanced Video Art (4 Credits)
This course continues the investigation of theories and practices of electronic media and expands into an individual exploration of video art focusing on off-screen time-based media through conceptual and technological experimentation. Projects explore creating digital video for projection into space, onto buildings, and in the form of installations, to name a few formats. Projects are used as a platform for creative expression focusing on the critical skills necessary for the conception and completion of ideas. Lab fee. Prerequisite: EDPX 3400 or permission of the instructor.

EDPX 3430 2.5D Motion (4 Credits)
This course provides students an opportunity to create multi-dimensionally active poetic orchestrations of text, video and audio using the post-production processing and animation tool After Effects. Lab fee. Prerequisite: EDPX 2400 or permission of the instructor. Cross listed with EDPX 4430.

EDPX 3440 Site-Specific Installation (4 Credits)
This class produces projects investigating physical space, virtual space and site-specific public installation. Lab fee. Cross listed with EDPX 4440. Prerequisite: EDPX 2400 or permission of the instructor.

EDPX 3450 Visual Programming (4 Credits)
This course introduces intuitive visual programming that allows rapid building of personalized tools for data, video, image, and sound manipulation. These tools can be used in real-time editing or performance, complex effects processing, or to bridge between multiple pieces of software. Lab fee. Cross listed with EDPX 4450. No prerequisites.

EDPX 3460 Visual Programming II (4 Credits)
This class uses advanced visual programming concepts (as provided by Max/MSP and Jitter) to explore visualization and sonification techniques in an artistic context. Areas of exploration include OpenGL modeling and animation, virtual physics emulation, audio synthesis techniques, and external data manipulation. Students use these concepts to create art installation and performance projects. Lab fee. Cross listed with EDPX 4460. Prerequisite: EDPX 3450 or permission of the instructor.

EDPX 3490 Expanded Cinema (4 Credits)
This course introduces several forms of expanded cinema, such as video remixes and mashups; live cinema and audiovisual performance; VJing; sonic visualization; visual music; and ambient video. The class extends the student’s multitrack video and audio mixing skills to an emphasis on both performative and generative approaches to audiovisual media. It introduces software and hardware sets including VJ tools and visual programming for generating as well as manipulating video files and real-time source streams. Lab fee. Cross listed with EDPX 4490. Prerequisite: EDPX 2400 or permission of the instructor.

EDPX 3500 Sonic Arts (4 Credits)
This class introduces the tools and techniques of the sonic arts, including field recording; sampling and synthesis; sound editing and effects processing; and mixing. Students survey a variety of sonic arts, historical and contemporary, to understand techniques and strategies for developing and distributing sonic artifacts. Lab fee. Cross listed with EDPX 4500. Prerequisite: EDPX 2400 or permission of the instructor.

EDPX 3510 Sonic Arts II (4 Credits)
This class extends and applies the techniques and theories of the sonic arts to include loop-based composition, generative creation and modular processing. Students learn to add richness and complexity to audio work based on a combination of modern and classic techniques for audio production and the sonic arts. Class assignments include creation of audio for video and games, live performance and installation. Lab fee. Prerequisite: EDPX 3500 or permission of the instructor.

EDPX 3520 Voice & Sonic Environments (4 Credits)
This course covers environmental sound design with an emphasis on the human voice and acoustic ecologies. Studying and exploring a range of documentary, narrative and experimental approaches to sound design and the spoken word, students write and produce several short audio pieces. The final output consists of a podcast, voice-oriented performance and/or sonic installation. Lab fee. Prerequisite: EDPX 3500 or permission of the instructor. Cross listed with EDPX 4520.

EDPX 3530 3D Modeling (4 Credits)
This course serves as an introduction to 3D modeling, texturing, and lighting on the computer. Students complete a series of projects in which the processes of preparing and producing a 3D piece are explored. Various strategies and techniques for creating detailed models to be used in animation and games are examined. Additional attention is spent on virtual camera techniques as well as the use of composting in creating final pieces. Current trends in the field are addressed through the analysis and discussion of current and historical examples. Lab fee. Cross listed with EDPX 4530, MFJS 3600. Prerequisite: EDPX 2000 or permission of the instructor.

EDPX 3540 3D Animation (4 Credits)
This course examines animation within virtual 3D environments. Starting with basic concepts, the course develops timing and spacing principles in animation to support good mechanics. They also serve as the basis for the more advanced principles in character animation as the class processes. Lab fee. Cross listed with EDPX 4540. Prerequisite: EDPX 3600 or permission of the instructor.

EDPX 3550 3D Spaces (4 Credits)
An exploration of 3D digital space and the possibilities found in games, narratives and visualizations in these spaces. A real-time engine is used by students to examine the opportunities of virtual 3D worlds. Lab fee. Prerequisite: EDPX 3600 or permission of the instructor.
EDPX 3700 Topics in Emergent Digital Culture (4 Credits)
This course provides an in-depth exploration of the emergent digital practice of a particular culture and a unique area of advanced study (for example, art and science studies; activism; youth culture; critical game studies; the philosophy of technology; or social networking). Students learn the social/historical context of the particular culture and observe and document the interplay between cultural practices and particular technologies. This course may be repeated. Prerequisite: varies with topic.

EDPX 3701 Topics in Emergent Digital Making (1-4 Credits)
Topics in Emergent Digital Practices.

EDPX 3710 Critical Game Studies (4 Credits)
This course is a critical investigation of contemporary ludic cultures. Ludic cultures are environments and practice of play. This course is taught with a hybrid teaching model where games are treated as texts, and outcomes are in the form of discussion and synthetic media responses. We construct and play a hyper-local canon of games, both in and outside of class. We read from the growing body of literature in game studies. We reflect and respond to these texts through shareable media. This course satisfies a cultures requirement for emergent digital practices majors and minors. Lab fee. Prerequisite: EDPX 2200 or permission of the instructor.

EDPX 3725 Activist Media (4 Credits)
Today’s alternative cultures use internet and mobile technologies to access and circulate mainstream information, but also to exchange rapidly information that exists outside mainstream media channels. Activist movements today with access to digital tools and networks are no longer dependent on newspapers and broadcast networks to represent them and to disseminate their message. We are, however, just beginning to see how the proliferation of alternative networks of communication, and the content, practices, and identities they facilitate, interact with traditional political and business organizations as well as with traditional media products and practices. This course focuses on media activism over the past half-century tied to various social movements with an emphasis on contemporary protest movements and their use of new and old media tools and strategies. This course satisfies a cultures requirement for emergent digital practices majors and minors. Cross listed with EDPX 4725, MFJS 3150. At least junior standing required or permission of the instructor.

EDPX 3740 Performance Cultures (4 Credits)
This course explores the history and current state of technology and performance. Topics covered include expanded cinema, live cinema, VJing, performance art, and the intersections of audiovisual media and technologies with dance, theater, and more. This course incorporates reading and discussion of critical texts and documentation of theory, process and practices, and the class includes screening and discussion of examples of both historical and emerging forms of media-enriched performance. For output, students produce written media on a variety of performance-related issues, artifacts, and practitioners, culminating in a written document or interactive publication. Lab fee. Prerequisites: EDPX 2200 and EDPX 2400, or permission of the instructor.

EDPX 3750 Sound Cultures (4 Credits)
This course explores some of the cultures of artists, producers, and listeners that have formed around sound technologies. The class combines reading of critical texts and guided listening to study several genres of music, sound art and noise, ranging from post-WWII electronic music, field recordings and sound art, to hip-hop, techno, jam bands, and more. Interdisciplinary in critical approach, this class encourages students to listen to these sonic forms as intersections of technological, social, ideological, and imaginative forces. For output, students produce written media on a variety of sound-related issues, artifacts, and practitioners, culminating in a podcast or interactive publication. Lab fee. Cross listed with EDPX 4750. Prerequisites: EDPX 2200 and EDPX 2400, or permission of the instructor.

EDPX 3770 Cybercultures: The Social Science of Virtual Spaces (4 Credits)
This course encompasses a variety of lenses through which to view, evaluate and critique ideas of ‘community’ and communities in cyberspace (cyberculture). The course covers such issues as identity and race in cyberspace (including ‘identity and racial tourism’); communication technologies and social control; digital censorship; and utopian and dystopian representations of digital technology. The course also engages with social theories involving issues of technological determinism and the popular representation of technology. It explores the views of a diverse set of critics to ask whether digital things are ‘good’ for you and your communities. Cross listed with EDPX 4770. Prerequisite: EDPX 2200 or permission of the instructor.

EDPX 3780 Speculative Cultures: Science Fiction in Emergent Digital Practices (4 Credits)
This course explores the intersections of emergent digital practices and cultures with extrapolative thought experiments, technical speculations, and social criticisms of science fiction. Students read, discuss, write, and otherwise respond to primary texts by the likes of William Gibson, Bruce Sterling, Cory Doctorow, Philip K. Dick, and Hiroshi Yamamoto. Science fiction studies may also include sub-genres (steampunk, hard science fiction, ecological) and regional categories (Japanese sci-fi), as well as consider science fiction in other media formats (sound recordings, film, games). For output, students produce written materials in a variety of formats, culminating in a formal essay or interactive publication. Cross listed with EDPX 4780. Prerequisite: EDPX 2200 or permission of the instructor.

EDPX 3800 Topics in Digital Making (4 Credits)
This course provides an in-depth exploration of the emergent digital practices of a technology or method for making (for example, wearables; interactive projections; augmented reality; immersive multi-channel soundscapes). Students learn the social/historical context of the particular method and consider the role and function their creations serve when it becomes public. This course may be repeated. Lab fee. Prerequisite: varies with topic.
EDPX 3950 Collaboration and Production (4 Credits)
In this collaborative capstone experience, students combine skills to create complex works that encourage the social collaboration of its audience or users. Students learn how to develop group working methods that take advantage of the skills of each member. This course requires full cooperation between team members in order to demonstrate synthesis of the principles of experience, emergence, and engagement taught throughout the program. Understanding and involving the audience as full participants in the final created experiences are also essential. Lab fee. At least junior standing required. Prerequisite: varies with topic.

EDPX 3960 BFA Capstone (4 Credits)
This course is required for all BFA students prior to taking the undergraduate capstone course. Students work independently with a faculty member to research and develop their capstone project in detail addressing ideas, making, venues, distribution, and other aspects of professional practice. Lab fee. Senior standing required. Must be a BFA student.

EDPX 3980 Internship (1-8 Credits)
Instructor approval required.

EDPX 3990 Capstone (4 Credits)
This course provides time and guidance for individual students to develop complex works that are a culmination of their studies. All projects must synthesize the principles of experience, emergence, and engagement taught throughout the program. All projects require both writing and making, the balance of these two to be determined by the nature of the work. Lab fee. Senior standing required.

EDPX 3991 Independent Study (1-8 Credits)
Independent Study form required.

EDPX 3992 Directed Study (1-8 Credits)
Independent Study form required.

Engineering

Electrical and Computer Engineering
Office: Clarence M. Knudson Hall, Room 300
Mail Code: 2390 S. York St. Denver, CO 80208
Phone: 303.871.6618
Email: eceinfo@du.edu
Web Site: www.du.edu/rsecs/departments/ece

Mechanical and Materials Engineering
Office: Clarence M. Knudson Hall, Room 200
Mail Code: 2390 S. York St. Denver, CO 80208
Phone: 303.871.2107
Email: mmeinfo@du.edu
Web Site: www.du.edu/rsecs/departments/mme

The mission of the Departments of Electrical and Computer Engineering (ECE) and Mechanical and Materials Engineering (MME) at the undergraduate level is to offer programs that support and complement the University mission; to provide a general undergraduate education in computer, electrical, and mechanical engineering that prepares students for employment or graduate study; to include interdisciplinary engineering work in all programs; to encourage the professional status of the faculty; and to foster the professional awareness of the students. This statement concisely sums up the goals and objectives of our programs. All Engineering degrees are accredited by the Engineering Accreditation Commission of ABET.¹

¹ 111 Market Place, Suite 1050
Baltimore, MD 21202-4012
Telephone: 410-347-7700

You will find information about the following topics below:

• Program Educational Objective
• Program Components
• Engineering Design
• Course of Study
• PINs and Undergraduate Research Assistantships
• Study Abroad
• Fundamentals of Engineering (FE) Exam & Enrollment as an Engineer-Intern (EI)
Program Educational Objectives

The undergraduate program objectives of the Electrical and Computer and Mechanical and Materials Engineering Departments are to produce graduates who, within a few years of graduation:

1. Apply their engineering and problem solving skills towards engineering practice, engineering graduate school, or non-engineering fields such as medicine, science, business, law, or public policy, while continuing to engage in life-long learning.

2. Value and demonstrate character in their chosen vocation by acting responsibly, ethically, and professionally while contributing to a sustainable common good for society.

3. View their educational experience as valuable and instrumental to their professional success.

Program Components

All of our engineering programs have several components:

1. The University of Denver’s Common Curriculum, which includes First-year Seminar, Writing and Rhetoric, Ways of Knowing, and Advanced Seminar;

2. Basic sciences and mathematics, including chemistry, physics, and mathematics;

3. A common engineering background, with contributions from basic material in computer, electrical, and mechanical engineering;

4. A four-year integrated engineering sequence, stressing engineering design and project work, much of which is interdisciplinary and involves constructive teamwork;

5. An engineering discipline (computer engineering, electrical engineering, mechanical engineering);

6. A specialization giving the discipline more depth, or complementing it, according to the student’s individual interests.

Engineering Design

The feature of engineering programs that most differentiates them from programs in basic or applied science and mathematics is engineering design, which is both an art and a science. Our programs feature a four-year stem of course work required of all students, regardless of curriculum, which emphasizes design, project work, team-work, and the application of scientific and technical knowledge and design skills already acquired to the solution of interdisciplinary engineering problems. As the student progresses in the curriculum, more and more reliance is placed on previous work, and more realistic constraints and considerations are required for success. The sequence culminates in a three-quarter capstone design project carried out in the final year. Additional design work is contained in specialized courses.

Course of Study

Engineering curricula are highly structured; acquisition of certain knowledge and skills must precede acquisition of more advanced ones. There is, thus, very little flexibility in the order in which courses must be completed, and there are few electives. Most engineering courses are offered only once a year, so an omission or deletion can add a year to the time required to complete the degree program. Although a high percentage of our students graduate in four years, it should be noted that, nationwide, nearly half of all engineering graduates take more than four years to complete their degrees, so students should not become discouraged if this is needed. The additional year may also be used to acquire additional expertise.

Engineering Common Curriculum: The curricula in all programs are the same for the first 5 quarters; a student can delay choosing an engineering major until the beginning of the spring quarter of their second year.

Advanced Curriculum (Four Year Program):

The curricula for the last two years have several components:

1. Advanced work in the engineering discipline chosen;

2. Integrated engineering project work and design;

3. Development of a specialized area (details of the areas of specialization for each degree program are given later in this booklet);

4. Completion of the University of Denver Common Curriculum

Advanced Curriculum (Five-Year Dual-Degree (BS/MS) Program):

The curricula for the last three years have several components:
1. Advanced work in the engineering discipline chosen;
2. Integrated engineering project work and design;
3. Completion of the University of Denver Common Curriculum;
4. Completion of the requirements for the MS in the engineering discipline.

Advanced Curriculum (Five-Year Program with MBA):

The curricula for the last three years have several components:

1. Advanced work in the engineering discipline chosen;
2. Integrated engineering project work and design;
3. Completion of the University of Denver Common Curriculum;
4. Completion of the requirements for the MBA.

For more information on any of these programs, please contact an advisor from either Electrical and Computer Engineering or Mechanical and Materials Engineering. Students interested in these options should discuss them with an advisor as early as possible in their undergraduate careers. For further information regarding these programs, visit the ECE (http://www.ece.du.edu) and MME (http://www.mme.du.edu) web sites.

PINS and Undergraduate Research Assistantships

Students wishing to participate in faculty research projects may be eligible for participation in PINS (Partners in Scholarship) or Undergraduate Research Assistantships (URA’s). PINS is a University-wide program in which a student performs research in conjunction with a faculty member. More information on PINS is available at http://www.du.edu/urc/. URA’s work directly with faculty, often for compensation, on current research efforts. Students can read about faculty research interests on the ECE (http://www.ece.du.edu) and MME (http://www.mme.du.edu) web sites. Such work enhances the student’s ability to compete for scholarships, internships, entrance to graduate study and permanent employment. A limited number of these are available and are typically restricted to upper-division students with good academic backgrounds. An agreement with a specific faculty member is required and the URA is requested by, and granted to, the faculty member.

Study Abroad

The University of Denver strongly encourages students to participate in study abroad programs, particularly the Cherrington Global Scholars Program; more information about which can be found at: http://www.du.edu/intl/abroad/

The engineering curricula have been structured so that students may take advantage of this opportunity in the autumn quarter of the senior year, rather than in the autumn quarter of the junior year, as is more usual in other DU programs.

Engineering students must be especially careful in planning this experience because of the highly restrictive and sequential nature of engineering curricula. It should also be noted that the abroad sites at which the required courses can be found are limited, vary depending on degree, and may change from one year to the next. Drs. Matt Gordon and Ron DeLyser are the department contacts for students interested in the Cherrington Global Scholar Program.

Fundamentals of Engineering (FE) Examination and Enrollment as an Engineer-Intern (EI)

As an essential part of our assessment program, all mechanical engineering students in our ABET/EAC accredited curricula must register for and take the FE exam before graduation. This is optional for all electrical and computer engineering students, but highly recommended. The FE Exam is the first of a two-step process in order to become registered as a Professional Engineer (PE).

The FE exam is a national 6-hour examination administered by NCEES (National Council of Examiners for Engineering and Surveying) in conjunction with the Colorado State Board for Professional Engineers and Land Surveyors. Students must have completed at least 135 credits to apply to take the FE exam, for which a fee is charged. For more information please contact the MME department chair.

After passing the FE exam, the student must send a final transcript recording the receipt of an engineering degree to the Colorado State Board for Professional Engineers and Land Surveyors. Typically, after passing the FE exam, the requirements for registration as a PE are 4 years of engineering experience under the supervision of a PE with increasing engineering responsibility and passing the PE examination.

Criteria for Entering Any of the Engineering Programs

In the first year, students should plan to take the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>
PHYS 1211  University Physics I  5
PHYS 1212  University Physics II  5

Students lacking the mathematics preparation to begin calculus in the first quarter may take MATH 1070 College Algebra and Trigonometry followed by the usual calculus sequence; these students should meet with an advisor from the engineering department before enrolling for courses. Failure to complete the courses listed above in the first year may lead to an additional year of study.

Minors in Engineering for Non-Engineering Students

Students desiring to minor in any of the engineering disciplines must take 20 hours of discipline specific engineering courses in addition to the equivalent of MATH 1951 Calculus I, MATH 1952 Calculus II, and MATH 1953 Calculus III. It is recommended that they have PHYS 1211 University Physics I, PHYS 1212 University Physics II, and PHYS 1213 University Physics III in their curriculum. Degree programs that “naturally flow” into an engineering minor are: chemistry, computer science, biology, mathematics and physics.

Computer Engineering

Bachelor of Science in Computer Engineering Requirements

(198 credits required for the degree) (p. 47)

This degree requires a minimum of 198 credits. Students not in the BSCPE/MBA combined program select a specialty area from communications, digital signal processing and networking; robotics, embedded systems and instrumentation, and computer systems engineering; or, under special circumstances, an individualized specialization may also be approved. Faculty mainly associated with computer engineering pursue research in microprocessors, microsystems, biomedical systems, computer architecture, complex VLSI systems design, digital systems modeling and simulation, networks, parallel and distributed control, and processing.

Requirements

198 credits are required for the degree including 48 credits of mathematics and basic science, 75 - 83 credits of engineering topics, and additional credit in computer science.

ENCE 2101  Digital Design  3
ENCE 3100  Advanced Digital System Design  4
ENCE 3210  Microprocessor Systems I  4
ENCE 3220  Microprocessor Systems II  4
ENCE 3250  HDL Modeling & Synthesis  3
ENCE 3241  Computer Organization and Architecture  3
ENCE 3501  VLSI Design  3
ENEE 2012  Circuits I and Laboratory  4
ENEE 2022  Circuits II  4
ENEE 2211  Electronics  4
ENEE 3111  Signals & Systems  4
ENGR 1511  Engineering Connections  1
ENGR 1572  Applied MATLAB Programming  3
ENGR 1611  Introduction to Mechanical Systems with CAD  4
ENGR 1622  Introduction to Mechatronic Systems I with MultiSim and MathCAD  4
ENGR 1632  Introduction to Mechatronic Systems II with LabView  4
ENGR 2610  Engineering Integration I  3
ENGR 2620  Engineering Integration II  3
ENGR 2950  Engineering Assessment I  0
ENGR 3100  Instrumentation and Data Acquisition  4
ENGR 3313  Engineering Design Project I  2
ENGR 3323  Engineering Design Project II  3
ENGR 3333  Engineering Design Project III  3
ENGR 3951  Engineering Assessment II  0
ENGR 3970  Entrepreneurship for Engineers and Computer Scientists  4
ENME 2510  Statics with Lab  4
ENME 2541  Mechanics of Materials  3
Notes
Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.

Additional Requirements

Chemistry
CHEM 1010 General Chemistry 3
CHEM 1240 General Chemistry Lab 1

Computer Science
COMP 1571 Procedural Programming I 3
COMP 1672 Introduction to Computer Science II 4
COMP 2300 Discrete Structures in Computer Science 1-4
COMP 2370 Introduction to Algorithms & Data Structures 4
COMP 3361 Operating Systems I 4

Mathematics
MATH 1951 Calculus I 4
MATH 1952 Calculus II 4
MATH 1953 Calculus III 4
MATH 2070 Introduction to Differential Equations 4
MATH 2080 Calculus of Several Variables 4

Physics
PHYS 1211 University Physics I 5
PHYS 1212 University Physics II 5
PHYS 1214 University Physics III for Engineers 4

Notes
Students must take an additional one (1) mathematics or science course from the approved list (4 credit hours). See Degree Program Plan for Approved courses.

Areas of Specialization
All Bachelor of Science in Computer Engineering students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives. The students must choose a minimum of 3 courses in one of the areas of specialization. For specific courses in the specialization areas, please see Degree Program Plan.

• Communications, DSP, and Networking
• Computer Systems Engineering
• Robotics, Embedded Systems, and Instrumentation
• Individualized Option

Nine credits of upper division technical courses selected with advisor's approval. A letter signed by the student's advisor giving the reason for the courses selected must be on file in the student's records.

Minor Requirements for Computer Engineering
20 credits, including:
COMP 1571 Procedural Programming I 3
ENCE 2101 Digital Design 3
ENEE 2012 Circuits I and Laboratory 4
Elective courses at the 2000-level or above

Electrical Engineering

Bachelor of Science in Electrical Engineering Requirements

(202 credits required for the degree) (p. 47)

This program requires a minimum of 202 credits. Students not in the BSEE/MBA combined program select a specialization from communication systems and digital signal processing; robotics, electronics, photonics and microsystems; or power and energy; or, under special circumstances, an individualized specialization may also be approved. Faculty mainly associated with electrical engineering pursue research in the areas of communication systems and networks, digital signal processing, optical communication devices and systems, photonics, robotics and controls, and autonomous systems.

Requirements

202 credits are required for the degree including 48 credits of mathematics and basic science and 75 - 83 credits of engineering topics.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCE 2101</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ENCE 3210</td>
<td>Microprocessor Systems I</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3220</td>
<td>Microprocessor Systems II</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2012</td>
<td>Circuits I and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2022</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2211</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2223</td>
<td>Advanced Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2611</td>
<td>Engineering Electromagnetics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3011</td>
<td>Physical Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3111</td>
<td>Signals &amp; Systems</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3130</td>
<td>Principles of Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1511</td>
<td>Engineering Connections</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1572</td>
<td>Applied MATLAB Programming</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1611</td>
<td>Introduction to Mechanical Systems with CAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1622</td>
<td>Introduction to Mechatronic Systems I with MultiSim and MathCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1632</td>
<td>Introduction to Mechatronic Systems II with LabView</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2610</td>
<td>Engineering Integration I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2620</td>
<td>Engineering Integration II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2950</td>
<td>Engineering Assessment I</td>
<td>0</td>
</tr>
<tr>
<td>ENGR 3100</td>
<td>Instrumentation and Data Acquisition</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>Engineering Design Project I</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 3323</td>
<td>Engineering Design Project II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3333</td>
<td>Engineering Design Project III</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3510</td>
<td>Renewable and Efficient Power and Energy Systems</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3530</td>
<td>Introduction to Power and Energy Conversion Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3610</td>
<td>Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3721</td>
<td>Controls</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3722</td>
<td>Control Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3735</td>
<td>Linear Systems</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3951</td>
<td>Engineering Assessment II</td>
<td>0</td>
</tr>
<tr>
<td>ENGR 3970</td>
<td>Entrepreneurship for Engineers and Computer Scientists</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>Statics with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2520</td>
<td>Dynamics I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2541</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
</tbody>
</table>

Technical Electives 12
Notes
Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.

Additional Requirements

Chemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>General Chemistry Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Computer Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1571</td>
<td>Procedural Programming I</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
</tbody>
</table>

Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211</td>
<td>University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1214</td>
<td>University Physics III for Engineers</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes
Students must take an additional one (1) mathematics or science course from the approved list (4 credit hours). See Degree Program Plan for Approved courses.

Areas of Specialization
All Bachelor of Science in Electrical Engineering students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives. For specific courses in the specialization areas, please see Degree Program Plan.

- Communications Systems and Digital Signal Processing
- Robotics
- Electronics, Photonics, and Microsystems
- Power and Energy
- Individualized Option

Nine credits of upper-division technical courses selected with advisor’s approval. A letter signed by the student’s advisor giving the reason for the courses selected must be on file in the student’s records.

Minor Requirements for Electrical Engineering

20 credits including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEE 2012</td>
<td>Circuits I and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2022</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2211</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3111</td>
<td>Signals &amp; Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEE courses at the 2000-level or above</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 20
Electrical Engineering with a Concentration in Mechatronic Systems Engineering

This degree program requires a minimum or 200 credits. Students not in the BSEE with a concentration in mechatronic systems engineering/MBA combined program select a specialization from mechanical systems, computer control and systems; or, under special circumstances, an individualized specialization may also be approved. Faculty associated with mechatronic systems engineering pursue research in the areas of robotics and controls and unmanned aerial systems.

Requirements for the Concentration
(200 credits required for the degree) (p. 47)

200 credits are required for the degree including 48 credits of mathematics and basic science and 75 - 83 credits of engineering topics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCE 2101</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ENCE 3210</td>
<td>Microprocessor Systems I</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3220</td>
<td>Microprocessor Systems II</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2012</td>
<td>Circuits I and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2022</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2211</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2223</td>
<td>Advanced Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2611</td>
<td>Engineering Electromagnetics</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3111</td>
<td>Signals &amp; Systems</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1511</td>
<td>Engineering Connections</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1572</td>
<td>Applied MATLAB Programming</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 1611</td>
<td>Introduction to Mechanical Systems with CAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1622</td>
<td>Introduction to Mechatronic Systems I with MultiSim and MathCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1632</td>
<td>Introduction to Mechatronic Systems II with LabView</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2610</td>
<td>Engineering Integration I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2620</td>
<td>Engineering Integration II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2950</td>
<td>Engineering Assessment I</td>
<td>0</td>
</tr>
<tr>
<td>ENGR 3100</td>
<td>Instrumentation and Data Acquisition</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>Engineering Design Project I</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 3323</td>
<td>Engineering Design Project II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3333</td>
<td>Engineering Design Project III</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3530</td>
<td>Introduction to Power and Energy Conversion Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3610</td>
<td>Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3721</td>
<td>Controls</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3722</td>
<td>Control Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3730</td>
<td>Robotics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3731</td>
<td>Robotics Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 3735</td>
<td>Linear Systems</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3951</td>
<td>Engineering Assessment II</td>
<td>0</td>
</tr>
<tr>
<td>ENGR 3970</td>
<td>Entrepreneurship for Engineers and Computer Scientists</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>Statics with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2520</td>
<td>Dynamics I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2530</td>
<td>Dynamics II</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2541</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENMT 3220</td>
<td>Mechatronics II - Real-Time Systems</td>
<td>4</td>
</tr>
<tr>
<td>Technical Electives</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

Notes
Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.
Additional Requirements

Chemistry

CHEM 1010  General Chemistry
CHEM 1240  General Chemistry Lab

Computer Science

COMP 1571  Procedural Programming I

Mathematics

MATH 1951  Calculus I
MATH 1952  Calculus II
MATH 1953  Calculus III
MATH 2070  Introduction to Differential Equations
MATH 2080  Calculus of Several Variables

Physics

PHYS 1211  University Physics I
PHYS 1212  University Physics II
PHYS 1214  University Physics III for Engineers

Notes

Students must take an additional one (1) mathematics or science course from the approved list (4 credit hours). See Degree Program Plan for Approved courses.

Areas of Specialization

BSEE-MSE Specialization

All EE-MSE students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives. For specific courses in the specialization areas, please see Degree Program Plan.

- Mechanical Systems
- Computer Systems
- Individualized Option

Nine quarter hours of upper division technical courses selected with advisor’s approval. A letter signed by the student’s advisor giving the reason for the courses selected must be on file in the student’s records.

Mechanical Engineering

Bachelor of Science in Mechanical Engineering (BSME)

This program requires a minimum of 192 credits. Faculty mainly associated with mechanical engineering pursue research in the areas of composite materials, fatigue, atmospheric science, bioengineering, mechanisms and nondestructive evaluation.

Requirements

192 credits are required for the degree including, at least 32 credits of non-engineering, at least 48 credits of mathematics and basic science, at least 103 credits of engineering topics and at least 3 open credit hours.

ENCE 2101  Digital Design
ENEE 2012  Circuits I and Laboratory
ENGR 1511  Engineering Connections
ENGR 1572  Applied MATLAB Programming
ENGR 1611  Introduction to Mechanical Systems with CAD
ENGR 1622  Introduction to Mechatronic Systems I with MultiSim and MathCAD
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1632</td>
<td>Introduction to Mechatronic Systems II with LabView</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 2610</td>
<td>Engineering Integration I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2620</td>
<td>Engineering Integration II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2910</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 2950</td>
<td>Engineering Assessment I</td>
<td>0</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>Engineering Design Project I</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 3323</td>
<td>Engineering Design Project II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3333</td>
<td>Engineering Design Project III</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3951</td>
<td>Engineering Assessment II</td>
<td>0</td>
</tr>
<tr>
<td>ENME 2410</td>
<td>Materials Science I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2421</td>
<td>Materials Science II</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>Statics with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2520</td>
<td>Dynamics I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2530</td>
<td>Dynamics II</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2540</td>
<td>System Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2541</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2651</td>
<td>Fluid Dynamics I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2661</td>
<td>Fluid Dynamics II/Heat Transfer I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2671</td>
<td>Heat Transfer II with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2710</td>
<td>Engineering Thermodynamics I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2720</td>
<td>Engineering Thermodynamics II</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2810</td>
<td>Mechanical Engineering Lab I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 3511</td>
<td>Machine Design</td>
<td>3</td>
</tr>
<tr>
<td>ENME 3810</td>
<td>Mechanical Engineering Capstone Library</td>
<td>3</td>
</tr>
</tbody>
</table>

Technical Electives: 12-16

**Additional Requirements**

**Chemistry**
- CHEM 1010 General Chemistry: 3 credits
- CHEM 1240 General Chemistry Lab: 1 credit

**Computer Science**
- COMP 1571 Procedural Programming I: 3 credits

**Mathematics**
- MATH 1951 Calculus I: 4 credits
- MATH 1952 Calculus II: 4 credits
- MATH 1953 Calculus III: 4 credits
- MATH 2070 Introduction to Differential Equations: 4 credits
- MATH 2080 Calculus of Several Variables: 4 credits

**Physics**
- PHYS 1211 University Physics I: 5 credits
- PHYS 1212 University Physics II: 5 credits
- PHYS 1214 University Physics III for Engineers: 4 credits

**Notes**

Students must take an additional 2-4 mathematics or science courses from the approved list (10-14 credit hours). See Degree Program Plan for Approved courses.
Minor Requirements for mechanical engineering

20 credits, including:

Select three of the following four courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENME 2510</td>
<td>Statics with Lab</td>
</tr>
<tr>
<td>ENME 2410</td>
<td>Materials Science I</td>
</tr>
<tr>
<td>ENME 2651</td>
<td>Fluid Dynamics I</td>
</tr>
<tr>
<td>ENME 2710</td>
<td>Engineering Thermodynamics I</td>
</tr>
</tbody>
</table>

Electives

ENME courses at the 2000-level or above

Computer Engineering

Bachelor of Science in Computer Engineering Requirements

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Credits Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 1010</td>
<td>3 ENGR 1622</td>
<td>4 ENGR 1632</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 1240</td>
<td>1 MATH 1952</td>
<td>4 MATH 1953</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FSEM 1111</td>
<td>4 PHYS 1211</td>
<td>5 PHYS 1212</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ENGR 1511</td>
<td>1 WRIT 1122</td>
<td>4 WRIT 1133</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENGR 1611</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1951</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Second</td>
<td>COMP 1571</td>
<td>3 ENEE 2012</td>
<td>4 ENEE 2022</td>
<td>4</td>
</tr>
<tr>
<td>Year</td>
<td>ENCE 2101</td>
<td>3 ENGR 1572</td>
<td>3 ENGR 2950</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>ENME 2510</td>
<td>4 ENME 2541</td>
<td>3 ENGR 3100</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 1214</td>
<td>4 MATH 2070</td>
<td>4 MATH 2080</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Third</td>
<td>ENCE 3100</td>
<td>4 COMP 1672</td>
<td>4 COMP 2300</td>
<td>4</td>
</tr>
<tr>
<td>Year</td>
<td>ENEE 2211</td>
<td>4 ENEE 3210</td>
<td>4 ENEE 3220</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENEE 3111</td>
<td>4 ENEE 3241</td>
<td>3 ENEE 3250</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Math/Sci/UCC</td>
<td>4 ENGR 2610</td>
<td>3 ENGR 2620</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>4 Technical Elective</td>
<td>4 Technical Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Fourth</td>
<td>COMP 2370</td>
<td>4 COMP 3361</td>
<td>4 ASEM 2000X Advanced Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Year</td>
<td>ENCE 3501</td>
<td>3 ENGR 3323</td>
<td>3 ENGR 3333</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGR 3313</td>
<td>2 LGST XXXX Legal Studies Elective</td>
<td>4 ENGR 3951</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Math/Sci/UCC</td>
<td>4 Technical Elective</td>
<td>4 ENGR 3970</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credits: 198

Notes

UCC – University Common Curricula - These may be taken in any order. They must have 2 courses with attributes of analytical inquiry: society and 2 courses attributes of scientific inquiry: society.

ASEM 2XXX - Advanced Seminar Engineering students are required to take a writing-intensive advanced seminar. Junior standing is also required.

Technical Elective. Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.
**Math/Sci.** One (1) math or science course from the approved list (4 credits). Note that without prior advisor approval only one approved math or science course may be taken instead of a UCC course in the first two years.

Total credits may vary based on technical elective options

### Approved Math/Sci Courses (subject to participating department course offerings):

**Biology**

BIOL 1010 Physiological Systems w/ BIOL 1020 Physiological Systems Lab; BIOL 1011 Evolution, Heredity and Biodiversity w/ BIOL 1021 Evolution, Heredity and Biodiversity Lab; BIOL 2090 Biostatistics; BIOL 2120 Cell Structure and Function w/ BIOL 2121 Cell Structure & Function Lab; BIOL 3250 Human Physiology

**Chemistry**


**Math**

MATH 2060 Elements of Linear Algebra; MATH 3080 Introduction to Probability; MATH 3090 Mathematical Probability; MATH 3851 Functions Complex Variable

**Physics**

PHYS 2251 Modern Physics I; PHYS 2252 Modern Physics II w/ PHYS 2260 Modern Physics Lab; PHYS 2259 Uncertainty and Error Analysis; PHYS 2300 Physics of the Body; PHYS 2340 Medical Imaging Physics; PHYS 3510 Analytical Mechanics I; PHYS 3711 Optics I

### Areas of Specialization

All Bachelor of Science in Computer Engineering students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives. The students must choose a minimum of 3 courses in one of the areas of specialization.

#### Communications, DSP, and Networking

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCE 3231</td>
<td>Embedded Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3261</td>
<td>Fault Tolerant Computing</td>
<td>3</td>
</tr>
<tr>
<td>ENCE 3231</td>
<td>Network Design</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3630</td>
<td>Pattern Recognition</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3130</td>
<td>Principles of Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENEE 3141</td>
<td>Digital Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENEE 3670</td>
<td>Introduction to Digital Signal Processing</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Computer Systems Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 3501</td>
<td>Introduction to Artificial Intelligence</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3801</td>
<td>Introduction Computer Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3231</td>
<td>Embedded Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3261</td>
<td>Fault Tolerant Computing</td>
<td>3</td>
</tr>
<tr>
<td>ENCE 3231</td>
<td>Network Design</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3620</td>
<td>Computer Vision</td>
<td>4</td>
</tr>
<tr>
<td>ENMT 3220</td>
<td>Mechatronics II - Real-Time Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Robotics, Embedded Systems, and Instrumentation

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 3501</td>
<td>Introduction to Artificial Intelligence</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3801</td>
<td>Introduction Computer Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3231</td>
<td>Embedded Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3261</td>
<td>Fault Tolerant Computing</td>
<td>3</td>
</tr>
</tbody>
</table>
ENCE 3321  Network Design  4
ENCE 3620  Computer Vision  4
ENCE 3630  Pattern Recognition  4
ENCE 3620  Computer Vision  4
ENGR 3721  Controls  3
ENGR 3730  Robotics  3
ENMT 3220  Mechatronics II - Real-Time Systems  4

**Individualized Option**

Nine credits of upper division technical courses selected with advisor’s approval. A letter signed by the student’s advisor giving the reason for the courses selected must be on file in the student’s records.

**Electrical Engineering**

**Bachelor of Science in Electrical Engineering Requirements**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>3 ENGR 1622</td>
<td>4 ENGR 1632</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1 MATH 1952</td>
<td>4 MATH 1953</td>
<td>4</td>
</tr>
<tr>
<td>FSEM 1111</td>
<td>4 PHYS 1211</td>
<td>5 PHYS 1212</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 1511</td>
<td>1 WRIT 1122</td>
<td>4 WRIT 1133</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1611</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>COMP 1571</td>
<td>3 ENEE 2012</td>
<td>4 ENEE 2022</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 2101</td>
<td>3 ENEE 1572</td>
<td>3 ENEE 2950</td>
<td>0</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>4 ENME 2541</td>
<td>3 ENGR 3100</td>
<td>4</td>
</tr>
<tr>
<td>Math/Sci/UCC</td>
<td>4 MATH 2070</td>
<td>4 ENME 2520</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1214</td>
<td>4 Math/Sci/UCC</td>
<td>4 MATH 2080</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ENEE 2211</td>
<td>4 ENEE 3210</td>
<td>4 ENEE 3220</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 2611</td>
<td>4 ENEE 3130</td>
<td>3 ENEE 2233</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3111</td>
<td>4 ENGR 2610</td>
<td>3 ENGR 2620</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3530</td>
<td>3 ENGR 3721</td>
<td>3 ENEE 3011</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3610</td>
<td>3 ENGR 3722</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Math/Sci/UCC</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>18</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ENGR 3510</td>
<td>4 ENGR 3323</td>
<td>3 ASEM 20XXX Advanced Seminar</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 3735</td>
<td>4 LGST XXXX Legal Studies Elective</td>
<td>4 ENGR 3333</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>2 Math/Sci/UCC</td>
<td>4 ENGR 3951</td>
<td>0</td>
</tr>
<tr>
<td>Math/Sci/UCC</td>
<td>4 Technical Elective</td>
<td>4 ENGR 3970</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>4</td>
<td>Technical Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Credits: 202**

**Notes**

**UCC – University Common Curricula**- These may be taken in any order. They must have 2 courses with attributes of analytical inquiry: society and 2 courses attributes of scientific inquiry: society.

**ASEM 2XXX - Advanced Seminar Engineering** students are required to take a writing-intensive advanced seminar. Junior standing is also required.

**Technical Elective.** Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.
Math/Sci. One (1) math or science course from the approved list (4 credits). Note that without prior advisor approval only one approved math or science course may be taken instead of a UCC course in the first two years.

Total credits may vary based on technical elective options

**Approved Math/Sci Courses (subject to participating department course offerings):**

**Biology**

BIOL 1010 Physiological Systemss w/ BIOL 1020 Physiological Systems Lab; BIOL 1011 Evolution, Heredity and Biodiversity w/ BIOL 1021 Evolution, Heredity and Biodiversity Lab; BIOL 2450 Human Anatomy; BIOL 2090 Biostatistics; BIOL 2120 Cell Structure and Function w/ BIOL 2121 Cell Structure & Function Lab; BIOL 3250 Human Physiology

**Chemistry**


**Math**

MATH 2060 Elements of Linear Algebra; MATH 3080 Introduction to Probability; MATH 3090 Mathematical Probability; MATH 3851 Functions Complex Variable

**Physics**

PHYS 2251 Modern Physics I; PHYS 2252 Modern Physics II w/ PHYS 2260 Modern Physics Lab; PHYS 2259 Uncertainty and Error Analysis; PHYS 2300 Physics of the Body; PHYS 2340 Medical Imaging Physics; PHYS 3510 Analytical Mechanics I; PHYS 3711 Optics I;

**Areas of Specialization**

All Bachelor of Science in Electrical Engineering students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives.

**Communications Systems and Digital Signal Processing**

Required:
ENEE 3141 Digital Communications 3
And two of the following:
ENCE 3321 Network Design 4
ENEE 3620 Optical Fiber Communications 4
ENEE 3670 Introduction to Digital Signal Processing 4

**Robotics**

Select three courses from the following:
ENCE 3100 Advanced Digital System Design 4
ENCE 3231 Embedded Systems Programming 4
ENCE 3620 Computer Vision 4
ENGR 3100 Instrumentation and Data Acquisition 4
ENGR 3730 Robotics 3
ENME 3545 Mechanisms 4
ENMT 3220 Mechatronics II - Real-Time Systems 4

**Electronics, Photonics, and Microsystems**

Select three courses from the following:
ENEE 3030 Optoelectronics 4
ENEE 3035 Photonics 4
ENEE 3620 Optical Fiber Communications 4
ENGR 3210 Intro Nano-Electro-Mechanics 4
ENGR 3215 NEMS and Nanofabrication Lab 4
ENGR 3220 Introduction to Micro-Electro-Mechanical-Systems and Microsystems 4
Power and Energy

One of the following:

- ENGR 3525 Power Electronics and Renewable Energy Laboratory 1
- ENGR 3535 Electric Power Engineering Laboratory 1

And two of the following:

- ENGR 3520 Introduction to Power Electronics 4
- ENGR 3540 Electric Power Systems 4
- ENGR 3545 Electric Power Economy 3

Individualized Option

Nine credits of upper-division technical courses selected with advisor’s approval. A letter signed by the student’s advisor giving the reason for the courses selected must be on file in the student’s records.

Electrical Engineering with a Concentration in Mechatronic Systems Engineering

Bachelor of Science in Electrical Engineering with a concentration in mechatronic systems engineering Requirements

<table>
<thead>
<tr>
<th>First Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Winter</td>
<td>Winter</td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>3</td>
<td>ENGR 1622</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1</td>
<td>MATH 1952</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1511</td>
<td>1</td>
<td>PHYS 1211</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 1611</td>
<td>4</td>
<td>WRIT 1122</td>
<td>4</td>
</tr>
<tr>
<td>FSEM 1111</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1951</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Winter</td>
<td>Winter</td>
</tr>
<tr>
<td>COMP 1571</td>
<td>3</td>
<td>ENEE 2012</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 2101</td>
<td>3</td>
<td>ENGR 1572</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>4</td>
<td>ENME 2541</td>
<td>3</td>
</tr>
<tr>
<td>Math/SCI/UCC</td>
<td>4</td>
<td>MATH 2070</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1214</td>
<td>4</td>
<td>Math/SCI/UCC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Winter</td>
<td>Winter</td>
</tr>
<tr>
<td>ENEE 2211</td>
<td>4</td>
<td>ENGE 3210</td>
<td>4</td>
</tr>
<tr>
<td>ENEE 3111</td>
<td>4</td>
<td>ENGR 2610</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3530</td>
<td>3</td>
<td>ENGR 3721</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3610</td>
<td>3</td>
<td>ENGR 3722</td>
<td>1</td>
</tr>
<tr>
<td>ENME 2530</td>
<td>3</td>
<td>Math/SCI/UCC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>Credits</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Winter</td>
<td>Winter</td>
</tr>
<tr>
<td>ENEE 2611</td>
<td>4</td>
<td>ENGR 3323</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>2</td>
<td>ENGR 3730</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3735</td>
<td>4</td>
<td>ENGR 3731</td>
<td>1</td>
</tr>
<tr>
<td>Math/SCI/UCC</td>
<td>4</td>
<td>LGST XXXX Legal Studies Elective</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>4 Math/SCI/UCC</td>
<td>4 Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>18</td>
<td>14</td>
</tr>
</tbody>
</table>

Total Credits: 200
Notes

UCC – University Common Curricula- These may be taken in any order. They must have 2 courses with attributes of analytical inquiry: society and 2 courses attributes of scientific inquiry: society.

ASEM 2XXX - Advanced Seminar Engineering students are required to take a writing-intensive advanced seminar. Junior standing is also required.

Technical Elective. Technical electives are used to complete specializations for the degree. Only technical courses may be used, and these must carry upper-division credit. Prior approval by the advisor is required.

Math/Sci. One (1) math or science course from the approved list (4 credits). Note that without prior advisor approval only one approved math or science course may be taken instead of a UCC course in the first two years.

These hours may vary based on technical electives

Approved Math/Sci Courses (subject to participating department course offerings):

**Biology**

BIOL 1010 Physiological Systems w/ BIOL 1020 Physiological Systems Lab; BIOL 1011 Evolution, Heredity and Biodiversity w/ BIOL 1021 Evolution, Heredity and Biodiversity Lab; BIOL 2450 Human Anatomy; BIOL 2090 Biostatistics; BIOL 2120 Cell Structure and Function w/ BIOL 2121 Cell Structure & Function Lab; BIOL 3250 Human Physiology

**Chemistry**


**Math**

MATH 2060 Elements of Linear Algebra; MATH 3080 Introduction to Probability; MATH 3090 Mathematical Probability; MATH 3851 Functions Complex Variable

**Physics**

PHYS 2251 Modern Physics I; PHYS 2252 Modern Physics II w/ PHYS 2260 Modern Physics Lab; PHYS 2259 Uncertainty and Error Analysis; PHYS 2300 Physics of the Body; PHYS 2340 Medical Imaging Physics; PHYS 3510 Analytical Mechanics I; PHYS 3711 Optics I

Areas of Specialization

BSEE-MSE Specialization

All EE-MSE students are required to choose an area of specialization. The area of specialization can be fulfilled through the students choice of technical electives.

Mechanical Systems

Students must choose from 3 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENME 2541</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2810</td>
<td>Mechanical Engineering Lab I</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2820</td>
<td>Mechanical Engineering Lab II</td>
<td>3</td>
</tr>
<tr>
<td>ENME 3511</td>
<td>Machine Design</td>
<td>3</td>
</tr>
<tr>
<td>ENME 3545</td>
<td>Mechanisms</td>
<td>4</td>
</tr>
</tbody>
</table>

Computer Systems

Students must take the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCE 3261</td>
<td>Fault Tolerant Computing</td>
<td>3</td>
</tr>
<tr>
<td>ENCE 3231</td>
<td>Embedded Systems Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENCE 3241</td>
<td>Computer Organization and Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>

Individualized Option

Nine quarter hours of upper division technical courses selected with advisor’s approval. A letter signed by the student’s advisor giving the reason for the courses selected must be on file in the student’s records.
# Mechanical Engineering

## First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits Winter</th>
<th>Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>3 ENGR 1622</td>
<td>4 ENGR 1632</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1240</td>
<td>1 MATH 1952</td>
<td>4 PHYS 1212</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 1511</td>
<td>1 PHYS 1211</td>
<td>5 MATH 1953</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 1611</td>
<td>4 WRIT 1122</td>
<td>4 WRIT 1133</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>FSEM 1111</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1951</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

## Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits Winter</th>
<th>Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1571</td>
<td>3 ENEE 2012</td>
<td>4 ENGR 2960</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ENCE 2101</td>
<td>3 ENGR 1572</td>
<td>3 ENME 2520</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2510</td>
<td>4 ENME 2541</td>
<td>3 ENME 2710</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Math/Sci/UCC*</td>
<td>4 MATH 2070</td>
<td>4 MATH 2080</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1214</td>
<td>4 Math/Sci/UCC*</td>
<td>4 Math/Sci/UCC*</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td>18</td>
<td>18</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

## Third Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits Winter</th>
<th>Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENME 2410</td>
<td>3 ENGR 2610</td>
<td>3 ENGR 2620</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ENME 2530</td>
<td>3 ENME 2421</td>
<td>3 ENGR 2910</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2651</td>
<td>3 ENME 2661</td>
<td>3 ENME 2671</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENME 2720</td>
<td>3 ENME 3511</td>
<td>3 ENME 2540</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

## Fourth Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits Winter</th>
<th>Winter</th>
<th>Credits Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEM 2XXX Advanced Seminar*</td>
<td>4 ENGR 3323</td>
<td>3 ENGR 3333</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 3313</td>
<td>2 ENME 2810</td>
<td>3 ENGR 3951</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Math/Sci/Tech/Law/UCC*</td>
<td>4 Math/Sci/Tech/Law/UCC*</td>
<td>4 ENME 3810 (Mechanical Engr Capstone Lab)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>OOOO Open Elective*</td>
<td></td>
<td></td>
<td>3-4</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

**NOTES:**

**UCC – University Common Curricula.** These may be taken in any order. They must have 2 courses with attributes of analytical inquiry: society and 2 courses attributes of scientific inquiry: society (16 credits).

**ASEM 2XXX - Advanced Seminar.** Required writing-intensive advanced seminar. Junior or senior standing is required (4 credits)

**OOOO - Open Elective.** May be any course at the 1000 level or above (3 or 4 credits as needed to reach 192 total QH).

**Math/Sci/Law.** Three (3) 3000 or higher engineering courses (ENGR, ENME, ENEE, ENCE, ENBI, ENMT, or MTSC), which are not required for the major (12 credits ). 2-4 math or science courses from the approved list (10 credits). 1 math or science or technical or law school course (3 or 4 credits). Note that without prior advisor approval only one approved math or science course may be taken instead of a UCC course in the first two years.

**Approved Math/Sci/Law Courses (subject to participating department course offerings):**

**Biology**

BIOL 1010 Physiological Systems w/BIOL 1020 Physiological Systems Lab; BIOL 1011 Evolution, Heredity and Biodiversity w/BIOL 1021 Evolution, Heredity and Biodiversity Lab; BIOL 2450 Human Anatomy; BIOL 2090 Biostatistics; BIOL 2120 Cell Structure and Function w/BIOL 2121 Cell Structure & Function Lab; BIOL 3250 Human Physiology

**Chemistry**

Math

MATH 2060 Elements of Linear Algebra; MATH 3080 Introduction to Probability; MATH 3090 Mathematical Probability; MATH 3851 Functions Complex Variable

Physics

PHYS 2251 Modern Physics I; PHYS 2252 Modern Physics II w/ PHYS 2260 Modern Physics Lab; PHYS 2259 Uncertainty and Error Analysis; PHYS 2300 Physics of the Body; PHYS 2340 Medical Imaging Physics; PHYS 3510 Analytical Mechanics I; PHYS 3711 Optics I

Law School

LAWS 4310 Introduction to Intellectual Property; LAWS 4220 Environmental Law

Engineering, Bio Courses

ENBI 3100 Bioengineering System Design (1-3 Credits)
This course will prepare students to participate in a capstone engineering design project. They will learn the ethical treatment of patients, identify and survey the needs of a patient population, identify leading projects, form a design team, discuss human factors issues, and develop an initial strategy for project design.

ENBI 3500 Biofluids (4 Credits)
The application of fluid dynamics theory and design to problems within the biomedical community. Specific topics covered include the mechanics of inhaled therapeutic aerosols, basic theory of circulation and blood flow, foundations in biotechnology and bioprocessing, and controlled drug delivery. Cross listed with ENBI 4500.

ENBI 3510 Biomechanics (4 Credits)
An introduction to the mechanical behavior of biological tissues and systems. Specific topics covered include analysis of the human musculoskeletal system as sensors, levers, and actuators; joint articulations and their mechanical equivalents; kinematic and kinetic analysis of human motion; introduction to modeling human body segments and active muscle loading for analysis of dynamic activities; mechanical properties of hard and soft tissues; mechanical and biological considerations for repair and replacement of soft and hard tissue and joints; orthopedic implants. Cross listed with ENBI 4510. Prerequisites: ENME 2410, ENME 2520, and ENME 2541.

ENBI 3800 Topics in Bioengineering (1-4 Credits)
Special topics in bioengineering as announced. May be taken more than once. Prerequisite: varies with offering.

ENBI 3992 Directed Study (1-5 Credits)

Engineering, Computer Courses

ENCE 1992 Directed Study (1-10 Credits)
ENCE 2101 Digital Design (0-3 Credits)
Basic logic concepts. Boolean algebra, truth tables and logic diagrams. Karnaugh maps; programmable devices including ROM’s, PLA’s and PAL’s; data selectors and multiplexors; flip-flops, and memory design of sequential logic circuits. State diagrams, counters, latches and registers; realization of sequential and arbitrary counters; monostable multivibrators. Course includes engineering ethics. Laboratory. Prerequisite: ENGR 1622, ENGR 1632, or permission of instructor.

ENCE 2992 Directed Study (1-10 Credits)
ENCE 3100 Advanced Digital System Design (4 Credits)
Design of logic machines. Finite state machines, gate array designs, ALU and control unit designs, microprogrammed systems. Hardware design of digital circuits using SSI and MSI chips. Introduction to probability and statistics. Application of probability and stochastic processes for cache and paging performance. Laboratories incorporate specification, top-down design, modeling, implementation and testing of actual digital design systems hardware. Simulation of circuits using VHDL before actual hardware implementation. Laboratory. Cross listed with ENCE 4110. Prerequisite: ENCE 2101.

ENCE 3110 Introduction to High Speed Digital Design (4 Credits)
Fundamental topics related to the development of high speed digital systems. Topics include signal integrity and reliability related to crosstalk, parasitic, and electromagnetic interference caused by device clocking speed and system complexity. At least junior standing required. Must be a computer or electrical engineering student. Cross listed with ENCE 4100.

ENCE 3210 Microprocessor Systems I (4 Credits)
Introduction to microprocessors and to the design and operation of computer systems. A study of the microprocessor and its basic support components. Analysis of CPU architectures of modern computers. Assembly language programming. Use of an assembler and other development tools for programming and developing microprocessor-based systems. Laboratory. Cross listed with ENCE 4210. Prerequisite: ENCE 2101.

ENCE 3220 Microprocessor Systems II (4 Credits)
Introduction to microprocessors and to the design and operation of computer systems. A study of the microprocessor and its basic support components. Analysis CPU architectures of modern computers. Assembly language programming. Use of an assembler and other development tools for programming and developing microprocessor-based systems. Laboratory. Prerequisite: ENCE 3210.
ENCE 3231 Embedded Systems Programming (4 Credits)
Design, construction and testing of microprocessor systems. Hardware limitations of the single-chip system. Includes micro-controllers, programming for small systems, interfacing, communications, validating hardware and software, microprogramming of controller chips, design methods and testing of embedded systems. Prerequisite: ENCE 3220.

ENCE 3241 Computer Organization and Architecture (3 Credits)
Organization of digital computers; memory, register transfer and datapath; Arithmetic Logic Unit; computer architecture; control unit; I/O systems. Prerequisite: ENCE 2101.

ENCE 3250 HDL Modeling & Synthesis (3 Credits)
Introduction to Hardware Design Language (HDL). Language syntax and synthesis. Applications related to digital system implementation are developed. Project. Prerequisite: ENCE 2101 or instructor's permission.

ENCE 3261 Fault Tolerant Computing (3 Credits)

ENCE 3211 Network Design (4 Credits)
Introduction to network components. Layering of network architecture. Analysis of Local Area Network (LAN) concepts and architecture based on IEEE standards. Design principles including switching and multiplexing techniques, physical link, signal propagation, synchronization, framing and error control. Application of probability and statistics in error detecting and control. Ethernet, Token-ring, FDDI (Fiber Distributed Data Interface), ATM (Asynchronous Transfer Mode), ISDN (Integrated Service Data Networks). Prerequisite: ENEE 3111, ENCE 2101 or permission of instructor.

ENCE 3501 VLSI Design (3 Credits)
Design of Very Large Scale Integration systems. Examination of layout and simulation of digital VLSI circuits using a comprehensive set of CAD tools in a laboratory setting. Studies of layouts of CMOS combinational and sequential circuits using automatic layout generators. Fundamental structures of the layout of registers, adders, decoders, ROM, PLA's, counters, RAM and ALU. Application of statistics and probability to chip performance. CAD tools allow logic verification and timing simulation of the circuits designed. Cross listed with ENCE 4501. Prerequisite: ENCE 3220.

ENCE 3620 Computer Vision (4 Credits)
This course is an introduction to the basic concepts in image processing and computer vision. First, an introduction to low-level image analysis methods, including radiometry and geometric image formation, edge detection, feature detection, and image segmentation are presented. Then, geometric-based image transformations (e.g., image warping and morphing) for image synthesis will be presented in the course. Furthermore, methods for reconstructing three-dimensional scenes including camera calibration, Epipolar geometry, and stereo feature matching are introduced. Other important topics include optical flow, shape from shading, and three-dimensional object recognition. In conclusion, students learn and practice image processing and computer vision techniques that can be used in other areas such as robotics, pattern recognition, and sensor networks. Cross listed with ENCE 4620. Prerequisite: ENEE 3311.

ENCE 3630 Pattern Recognition (4 Credits)
This class provides an introduction to classical pattern recognition. Pattern recognition is the assignment of a physical object or event to one of several prescribed categories. Applications includes automated object recognition in image and videos, face identification, and optical character recognition. Major topics include Bayesian decision theory, Parametric estimation and supervised learning, Linear discriminant functions, Nonparametric methods, Feature extraction for representation and classification, Support Vector Machines. Cross listed with ENCE 4630.

ENCE 3830 Topics in Computer Engineering (1-5 Credits)
Special topics in computer engineering as announced. May be taken more than once. Prerequisite: varies with offering.

ENCE 3991 Independent Study (1-5 Credits)
Topics in computer engineering investigated under faculty supervision. May be taken more than once. Students must obtain and complete an Independent Study form from the Office of the Registrar. Prerequisite: permission of instructor.

ENCE 3992 Directed Study (1-10 Credits)
ENCE 3995 Independent Research (1-10 Credits)

Engineering, Electrical Courses

ENCE 1992 Directed Study (1-10 Credits)
ENCE 2012 Circuits I and Laboratory (4 Credits)
An introduction to electrical circuit analysis, design and evaluation. Emphasis on definitions of basic variables, passive circuit components and the ideal operational amplifier. DC analysis of circuits and circuit theorems are stressed. AC signals are introduced. Computer analysis software integrated throughout the course. Cross-listed with PHYS 2011. Prerequisites: ENGR 1622, ENGR 1632, PHYS 1214, MATH 1953.
ENEE 2223 Advanced Electronics (4 Credits)
High-frequency transistor models and determination of parameters: Laplace and Fourier analyses of common amplifier circuits; design and analysis of broad-band amplifiers and multistage amplifiers. Basis feedback topologies; Nyquist, root-locus and Bode plot investigations of stability; introduction to amplifier noise; active filter design; sinusoidal oscillators. Prerequisite: ENEE 2211.

ENEE 2611 Engineering Electromagnetics (4 Credits)
The study of Maxwell's equations and their experimental and theoretical foundations. Topics include Static electromagnetic fields, time-varying electromagnetic fields, wave propagation, transmission lines, and antennas. Prerequisites: PHYS 1213, PHYS 1214. Corequisite: ENGR 3610 or ENGR 3620.

ENEE 2992 Directed Study (1-10 Credits)
ENEE 3011 Physical Electronics (4 Credits)
The basic physical concepts of electronics, electrons and holes in semiconductors, transport and optical processes. Concentration on device concepts, including material synthesis and device processing, P-N junction diodes, junctions with other materials, bipolar transistors, field effect transistors (JFET, MESFET, MOSFET) and optoelectronic effect transistors (JFET, MESFET, MOSFET) and optoelectronic devices (lasers, detectors). Prerequisites: CHEM 1010, CHEM 1610, PHYS 1213, PHYS 1214 or permission of instructor.

ENEE 3030 Optoelectronics (4 Credits)
The active and passive optical elements. Includes principles of light, optical sources (LED, LASER, Fiber Laser), optical fibers, photodetectors (APD, PIN, MSM) and practical optical transmitter and receivers. Laboratory. Cross listed with ENEE 4030. Prerequisite: ENEE 3011 or ENEE 2211 or permission of instructor.

ENEE 3035 Photonics (4 Credits)
Theory and techniques for the application of the optical electromagnetic spectrum from infrared to ultraviolet to engineering problems in communications, instrumentation and measurement. May include lasers, optical signal processing, holography, nonlinear optics, optical fiber communications, optical behavior of semiconductors, and similar topics in modern optics, depending on the interests and requirements of the students. Cross-listed with EEE 4800. Prerequisite: ENEE 2611 or instructor's permission.

ENEE 3111 Signals & Systems (4 Credits)
Introduces continuous time and discrete time linear system analysis, Fourier series, Fourier transforms and Laplace transforms. Specific engineering tools for discrete time linear system analysis include discrete time convolution, Z-transform techniques, discrete Fourier transform and fast Fourier transform (DFT/FFT), and the design and analysis of analog and digital filters for real-world signal processing applications. Prerequisites: ENEE 2021, MATH 2070.

ENEE 3130 Principles of Communication Systems (3 Credits)
Introduction to the theory and analysis of communication systems. Emphasis on analog systems; application of probability and statistics, modulations and demodulations; noise and signal-to-noise ratio analysis; the measure of information, channel capacity, coding and design factors. Prerequisites: ENEE 3111, ENGR 3610 or permission of instructor.

ENEE 3141 Digital Communications (3 Credits)
Introductory course on modern digital communication systems. The basic communication system theory, probability and random processes, baseband digital data transmission, coherent and non-coherent digital modulation techniques and analysis of bit error probability. Bandwidth efficiency and transmission of digital data through band-limited channels. Prerequisites: ENEE 3111, ENGR 3610 or permission of instructor.

ENEE 3611 Analysis and Design of Antennas and Antenna Arrays (4 Credits)
Maxwell's equations applied to antenna analysis and design. Topics include fundamental parameters of antennas, radiation integrals and auxiliary potential functions, analysis and design of linear wire antennas, loop antennas, arrays, broadband antennas, frequency independent antennas, aperture antennas and horns. Integrated lab included. Prerequisite: ENEE 2611.
ENEE 3620 Optical Fiber Communications (4 Credits)
A comprehensive treatment of the theory and behavior of basic constituents, such as optical fibers, light sources, photodetectors, connecting and coupling devices, and optical amplifiers. The basic design principles of digital and analog optical fiber transmission links. The operating principles of wavelength-division multiplexing (WDM) and the components needed for its realization. Descriptions of the architectures and performance characteristics of complex optical networks for connecting users with a wide range of transmission needs (SONET/SDH). Discussions of advanced optical communication techniques, such as soliton transmission, optical code-division multiplexing (optical CDMA) and ultra-fast optical time-division multiplexing (OTDM). Laboratory. Cross listed with ENEE 4620. Prerequisite: ENEE 3030 or permission of instructor.

ENEE 3641 Introduction to Electromagnetic Compatibility (4 Credits)
The study of the design of electronic systems so that they operate compatibly with other electronic systems and also comply with various governmental regulations on radiated and conducted emissions. Topics may include Electromagnetic Compatibility (EMC) requirements for electronic systems; non-ideal behavior of components; radiated emissions and susceptibility; conducted emissions and susceptibility; shielding and system design for EMC. Includes integrated lab. Cross listed with ENEE 4640. Prerequisites: ENEE 3111, ENEE 2611 and ENEE 2222.

ENEE 3660 Communications Systems Design (4 Credits)
Design and performance evaluation of terrestrial and space communications systems; error correction coding; spread spectrum communication; link budget analysis and environmental effects. System design considerations include engineering judgment decisions to implement optimum communication configurations such as data rates, bandwidth, modulation schemes and operating frequencies. Prerequisite: ENEE 3130.

ENEE 3670 Introduction to Digital Signal Processing (4 Credits)
Introduction to the theory and applications of Digital Signal Processing. Special attention is paid to the fast Fourier transform and convolution and to the design and implementation of both FIR and IIR digital filters. Prerequisite: ENEE 3111.

ENEE 3810 Topics Electrical Engineering (1-5 Credits)
Various topics in electrical engineering as announced. May be taken more than once. Prerequisite: varies with offering.

ENEE 3991 Independent Study (1-5 Credits)
Topics in electrical engineering investigated under faculty supervision. May be taken more than once. Students must obtain and complete an Independent Study form from the Office of the Registrar. Prerequisite: permission of instructor.

ENEE 3992 Directed Study (1-10 Credits)

Engineering, Mechanical Courses

ENME 2410 Materials Science I (3 Credits)
Atomic structure, bonding and crystal structures in solids. Diffusion and crystal defects. Thermodynamics and phase equilibria in one-, two- and three-component systems, binary phase diagrams. Kinetics and phase transformations. Specific microstructure and mechanical properties of metals, glasses, ceramics, polymers and composites. Electrical conduction: energy levels and bands, charge carriers and insulators. Semiconductors of intrinsic and extrinsic types. Prerequisites: PHYS 1212, CHEM 1010, CHEM 1610, MATH 1953 or permission of instructor.

ENME 2421 Materials Science II (3 Credits)

ENME 2510 Statics with Lab (4 Credits)
Study of static force systems. Topics include resolution and composition of forces and moments, equilibrium of two-dimensional and three-dimensional force systems, shear and moments in beams, friction, and moments of inertia. Includes a laboratory component where students will engage in hands-on projects that apply loading equilibrium, design of structures, and stress/strain. Prerequisites: MATH 1952 and PHYS 1211.

ENME 2520 Dynamics I with Lab (4 Credits)

ENME 2530 Dynamics II (3 Credits)
Rotating reference frames, rigid body kinematics, rigid body kinetics, Euler’s Laws, inertia, energy and momentum, and three-dimensional motion. Cross listed with PHYS 2530. Prerequisites: ENME 2520 and MATH 2080.

ENME 2540 System Dynamics (3 Credits)
This course covers modeling, analysis, and control of single and multiple degree-of freedom dynamical systems, including mechanical, electrical, thermal, fluid systems and their combinations (mixed systems). Basic concepts in system theory, such as state variables and stability concepts, will be introduced as well as bond graph notation and approach. Prerequisites: ENME 2710, ENME 2661, ENME 2520, ENGR 1572, ENEE 2012.

ENME 2541 Mechanics of Materials (3 Credits)
Normal and shear stress and strain; elasticity, mechanical properties of materials, principal stresses; torsion, beams, deflection of beams under loads, methods of superposition, failure theory, columns. Prerequisite: ENME 2510.
ENME 2651 Fluid Dynamics I (3 Credits)
Course series provides students with the basic skill levels required to solve fluid-mechanics and heat transfer problems. Topics include hydrostatics, dimensional analysis, incompressible and compressible flows, conduction, convection and radiation. Students explore a variety of solution techniques such as control volume, differential analysis, boundary layer analysis, finite differencing and resistance network analogies. Prerequisite: ENME 2520.

ENME 2661 Fluid Dynamics II/Heat Transfer I (3 Credits)
Course series provides students with the basic skill levels required to solve fluid-mechanics and heat transfer problems. Topics include hydrostatics, dimensional analysis, incompressible and compressible flows, conduction, convection and radiation. Students explore a variety of solution techniques such as control volume, differential analysis, boundary layer analysis, finite differencing and resistance network analogies. Prerequisite: ENME 2651.

ENME 2671 Heat Transfer II with Lab (4 Credits)
Course series provides students with the basic skill levels required to solve fluid-mechanics and heat transfer problems. Topics include hydrostatics, dimensional analysis, incompressible and compressible flows, conduction, convection and radiation. Students explore a variety of solution techniques such as control volume, differential analysis, boundary layer analysis, finite differencing and resistance network analogies. Prerequisite: ENME 2651.

ENME 2710 Engineering Thermodynamics I (3 Credits)

ENME 2720 Engineering Thermodynamics II (3 Credits)

ENME 2810 Mechanical Engineering Lab I (3 Credits)
Engineering experiments illustrating selected topics in heat transfer, fluid mechanics, solid mechanics, thermodynamics, measurement and control. Use of microcomputers in experimentation and control. This course encourages the development of laboratory experimentation skills, design skills and technical writing skills. Prerequisites: ENME 2671 and ENME 2530 or permission of instructor.

ENME 2820 Mechanical Engineering Lab II (3 Credits)
Engineering experiments illustrating selected topics in heat transfer, fluid mechanics, solid mechanics, thermodynamics, measurement and control. Use of microcomputers in experimentation and control. This course encourages the development of laboratory experimentation skills, design skills and technical writing skills. Prerequisite: ENME 2810 or permission of instructor.

ENME 2992 Directed Study (1-10 Credits)

ENME 3310 Computational Methods for Mechanics and Materials (4 Credits)
An introductory course for the general-purpose computational methods in advanced multiscale materials and mechanics. Students learn the fundamentals of the numerical methods used in mechanical and materials engineering. Cross listed with ENME 4310.

ENME 3400 Fatigue (4 Credits)
A detailed overview of fatigue. Topics include: stress life and strain life approaches, fracture mechanics, constant amplitude and spectrum loading, life prediction, fatigue at notches, microstructural effects, environmentally assisted fatigue, retardation and acceleration, multi-axial fatigue, design against fatigue, and reliability. Cross listed with ENME 4400.

ENME 3511 Machine Design (3 Credits)
Application of statics, dynamics, mechanics of materials and manufacturing processes to the design of machine elements and systems. Properties of materials and design criteria. Synthesis and analysis of a machine design project. Prerequisites: ENME 2520, ENME 2541.

ENME 3545 Mechanisms (4 Credits)
Synthesis, analysis and use of mechanisms. Mechanisms studied include cams, gears and planar linkages, with an emphasis on planar linkages. Prerequisites: ENME 2530 and COMP 1572.

ENME 3610 Computational Fluid Dynamics (4 Credits)
This course introduces principles and applications of computational methods in fluid flow and topics chosen from heat transfer, mass transfer or two phase flow. The conservation equations, their discretations and solutions, are presented. Convergence and validity of solutions along with computational efficiency are explored. Students learn to apply these techniques using the latest software packages. Prerequisite: ENME 2671 or instructor approval.

ENME 3651 Computational Fluid Dynamics (4 Credits)
This course covers energy systems engineering analysis from a mechanical and materials engineering perspective. This course covers energy production from traditional energy systems that use fossil fuel combustion such as internal combustion engines, coal-fired plants, and natural gas turbines, to nuclear energy and renewable energy methods such as wind, solar, hydraulic, and geothermal. Lastly, the course will survey emerging technologies for future (21st century) energy systems. Students should have taken at a minimum Thermodynamics, Dynamics, and Fluid Dynamics courses. Prerequisites: ENME 2720, ENME 2510, ENME 2651.

ENME 3720 Introduction to Aerospace Engineering (4 Credits)
This course provides and introduction to aerospace engineering analysis and design. In the atmospheric domain, the basics of aerodynamics are covered, followed by flight mechanics. The approach is from a practical perspective in which analysis and design are intertwined. Students should have taken at a minimum Thermodynamics and Dynamics courses. Prerequisites: ENME 2710 and ENME 2510 or Graduate standing.
ENME 3810 Mechanical Engineering Capstone Library (3 Credits)
This course is the capstone mechanical engineering laboratory course requiring independent experimental design by student teams. Using experimental equipment available in heat transfer, fluid mechanics, solid mechanics, thermodynamics, and measurement and control, the student team is required to design experiments to solve given problems which will be unique to each team. This course encourages students to develop experimental design and research techniques while continuing to improve skills in fundamental lab notebook keeping, uncertainty analysis in measurements, data acquisition, data analysis, report writing, oral presentations, and laboratory safety and procedures. Prerequisite: ENME 2810.

ENME 3820 Topics Mechanical Engineering (1-5 Credits)
Mechanical engineering topics as announced. May be taken more than once. Prerequisite: varies with offering.

ENME 3991 Independent Study (1-5 Credits)
Topics in mechanical engineering investigated under faculty supervision. May be taken more than once. Students must obtain and complete an Independent Study form from the Office of the Registrar. Prerequisite: permission of instructor.

ENME 3992 Directed Study (1-10 Credits)

ENME 3995 Independent Research (1-10 Credits)

Engineering, Mechatronic Syst Courses

ENMT 3210 Mechatronics I (4 Credits)
This course provides basic concepts from electrical, mechanical, and computer engineering as applied to mechatronic systems and is intended to serve as a foundation course for further exploration in the area of mechatronics. Prerequisite: senior or graduate standing in engineering.

ENMT 3220 Mechatronics II - Real-Time Systems (4 Credits)
Real-time systems require timely response by a computer to external stimuli. This course examines the issues associated with deterministic performance including basic computer architecture, scheduling algorithms, and software design techniques including data flow diagrams, real-time data flow diagrams, stat transition diagrams, and petri nets. In the lab portion of this class, students program a microcontroller to interact with mechatronic devices. Prerequisite: ENMT 3210, ENCE 3210 or COMP 3354.

ENMT 3800 Topics (Mechatronics) (1-4 Credits)
Various topics in mechatronics system engineering as announced. May be taken more than once. Prerequisite: varies with offering.

Engineering Courses

ENGR 1240 Technology 21: Energy Requirements, Concerns, and Alternatives for the 21st Century (4 Credits)
Technology 21 is a three course sequence designed to provide students with an awareness of the technological challenges of the twenty-first century and an understanding of the scientific principles upon which the technology is based. The first quarter begins with a review of numeracy, the language of science and technology. The course explores our dependency on energy, the amount we consume is staggering and most comes from non-renewable fossil fuels. The second and third quarters are concerned with information technology and the relation between technology and global issues. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

ENGR 1241 Technology 21: Climate Science and Policy for the Twenty-First Century (4 Credits)
Technology 21 is a three course sequence designed to provide students with an awareness of the technological challenges of the twenty-first century and an understanding of the scientific principles upon which the technology is based. The first quarter begins with a review of numeracy, the language of science and technology. The course explores our dependency on energy, the amount we consume is staggering and most comes from non-renewable fossil fuels. The second and third quarters are concerned with information technology and the relation between technology and global issues. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

ENGR 1242 Technology 21: Information Theory and Technology (4 Credits)
Technology 21 is a three course sequence designed to provide students with an awareness of the technological challenges of the twenty-first century and an understanding of the scientific principles upon which the technology is based. The first quarter begins with a review of numeracy, the language of science and technology. The course explores our dependency on energy, the amount we consume is staggering and most comes from non-renewable fossil fuels. The second and third quarters are concerned with information technology and the relation between technology and global issues. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

ENGR 1511 Engineering Connections (1 Credit)
This is the first course in a three course sequence designed to help students bridge the gap from high school to a college environment in a very challenging major. Topics and activities include academic success strategies; interviewing engineering alumni; the ethics of the profession; visits to industry sites; seminars by industry and academic experts; establishing the relationships between math, science, and engineering courses with design projects; critical and creative thinking activities; tours of the research labs of the engineering professors; disseminating information on the dual degree programs, the MBA programs, the honor code, and engineering program structures; and readings from and discussions about articles from professional publications. Membership in a professional society is a required course component.
ENGR 1572 Applied MATLAB Programming (3 Credits)
The MATLAB programming environment is used to introduce engineering applications programming. It includes high performance numerical computation and visualization. Programming topics include an overview of an interactive programming environment, generation of m-files, variables and data types, arithmetic operators, mathematical functions, symbolic mathematics, graphic generation, use of programs in application specific toolboxes, embedding and calling C programs in m-files, file input/output, and commenting. Programming is oriented toward engineering problem solving. Prerequisites: COMP 1571, MATH 1951 and MATH 1952.

ENGR 1611 Introduction to Mechanical Systems with CAD (4 Credits)
Introduction to concepts and practice in computer, electrical and mechanical engineering including engineering ethics. Engineering problem-solving as it applies to engineering analysis, synthesis and design. Students practice structured teamwork and program management skills in the context of projects. Emphasis on computer tools with immediate application to engineering practice.

ENGR 1622 Introduction to Mechatronic Systems I with MultiSim and MathCAD (4 Credits)
Introduction to elementary concepts and practices in mechatronic systems engineering, in particular electrical engineering concepts including current and voltage and basic electrical circuit analysis, interfacing electrical circuits with mechanical systems, and assembly and testing of mechatronics subsystems. Students are required to complete simple projects including mechanical and electrical components during which they practice teamwork while gaining skills in electrical and mechatronic systems troubleshooting. Introduction to Multiscan circuit analysis software and Mathcad are among other topics covered in this course. Prerequisite: ENGR 1611, ENGR 1611.

ENGR 1632 Introduction to Mechatronic Systems II with LabView (4 Credits)
Study of fundamentals of computer-based systems and electromechanical systems controlled by microprocessors or microcontrollers. Introduction to digital logic and electronics. Introduction to LabView and use of LabView to build and evaluate circuits and simple electromechanical systems. Use of logic circuits to build analog to digital converters. Program microcontrollers. Study of autonomous vehicles as mechatronic systems and the ability to control them (small cars, robots, helicopters, quadrotors, etc.). Course requirements include a report with detailed analysis of the vehicle control system, flow charts, and program documentation. Prerequisites: ENGR 1611, ENGR 1622.

ENGR 1700 Machine Shop Practice (1 Credit)
Introduction to concepts and practice in basic machine tool work (i.e. mill, lathe, welding etc.). The course provides the necessary information for majors and non-majors to gain access to the DU Engineering Machine Shop. Class size is limited to 5 students per quarter. Enrollment priority will be given to engineering majors.

ENGR 1911 Introduction to CAD (2 Credits)
This course is intended for transfer students who have had an introduction to engineering, but who need to learn certain techniques and software typically dealt with in ENGR 1611 including engineering ethics.

ENGR 1921 Introduction in Engineering II (1 Credit)
This course is intended mainly for transfer students who have had an introduction to engineering, but who need to learn certain techniques and software typically dealt with in ENGR 1621 including engineering ethics.

ENGR 1931 Introduction to Engineering III (1 Credit)
This course is intended mainly for transfer students who have had an introduction to engineering, but who need to learn certain techniques and software typically dealt with in ENGR 1631 including engineering ethics.

ENGR 1992 Directed Study (1-10 Credits)

ENGR 2610 Engineering Integration I (3 Credits)
Interdisciplinary course combining topics from computer, electrical and mechanical engineering including engineering ethics, with emphasis on laboratory experience and the design, analysis and testing of interdisciplinary systems. Manufacture of mechanical systems and/or circuit boards. Team project work on interdisciplinary "design-and-build" projects. Prerequisites: ENGR 2035 and junior standing in the appropriate engineering discipline. Corequisite: enrollment in appropriate junior-level engineering courses.

ENGR 2620 Engineering Integration II (3 Credits)
Interdisciplinary course combining topics from computer, electrical and mechanical engineering including engineering ethics, with emphasis on laboratory experience and the design, analysis and testing of interdisciplinary systems. Manufacture of mechanical systems and/or circuit boards. Team project work on interdisciplinary "design-and-build" projects. Prerequisite: ENGR 2610. Corequisite: enrollment in appropriate junior level engineering courses.

ENGR 2905 Engineering Cooperative Education (0-12 Credits)
For students on full-time cooperative educational employment. This course may be taken up to four times. Any and all credits will not count toward your degree and you will receive a grade of NC (no credit) for all enrollments. You will choose between a residential and non-residential section.

ENGR 2910 Engineering Economics (3 Credits)
This course focuses on the practical application of economics to engineering. It explains concepts in accounting and finance and applies them to engineering situations. Topics that are discussed include: economic decision making, engineering cost and estimates, interest, inflation, depreciation, income taxes, minimum attractive rate of return, economic viability of projects, and the economic advantages of "green" technology.

ENGR 2950 Engineering Assessment I (0 Credits)
Examination covering basic mathematics, science and sophomore-level engineering topics. Must be taken prior to obtaining senior status in engineering. Prerequisites: ENEE 2021, ENME 2520, COMP 1572. Corequisites: ENGR 2035, ENCE 2101, ENME 2710.
ENGR 2992 Directed Study (1-10 Credits)

ENGR 3010 Instrumentation and Data Acquisition (4 Credits)
This course examines different instrumentation techniques and describes how different measurement instruments work. Measurement devices include length, speed, acceleration, force, torque, pressure, sound, flow, temperature, and advanced systems. This course also examines the acquisition, processing, transmission, and manipulation of data. Cross listed with ENGR 4100. Prerequisite: PHYS 1214.

ENGR 3200 Introduction to Nanotechnology (4 Credits)
In this highly interdisciplinary series of lectures spanning across engineering, physics, chemistry, and biology, an introduction to the subject of nanotechnology is provided. The most important recent accomplishments so far in the application of nanotechnology in several disciplines are discussed. Then a brief overview of the most important instrumentation systems used by nanotechnologists is provided. The nature of nanoparticles, nanomaterials, and composite structures is discussed. The course also deals with the fundamentals of nanotechnology and its applications to state of the art and future sensors, actuators, and electronics. Starting with an overview of nanotechnology and discussion of shifts in the electromechanical behavior and transduction mechanisms when scaling the physical dimensions from centimeters to micro-meters and then down to nanometers. Several electromechanical transduction mechanisms at the micro and nanoscale are presented and discussed in an application based context. New electromechanical interactions appearing in the nano and molecular scale, such as intra-molecular forces and molecular motors, are discussed. A detailed discussion and overview of nanofabrication technologies and approaches are also provided. Cross listed with ENGR 4210. Prerequisite: must be an engineering or science major of at least junior standing.

ENGR 3215 NEMS and Nanofabrication Lab (4 Credits)
This course provides science and engineering students with comprehensive hands-on experience in design, fabrication, and analysis of Nanoscale Electromechanical Systems (NEMS). NEMS is a relatively new and highly interdisciplinary field of science and technology with applications to state of the art and future sensors, actuators, and electronics. Starting with an overview of nanotechnology and discussion of shifts in the electromechanical behavior and transduction mechanisms when scaling the physical dimensions from centimeters to micro-meters and then down to nanometers. Several electromechanical transduction mechanisms at the micro and nanoscale are presented and discussed in an application based context. New electromechanical interactions appearing in the nano and molecular scale, such as intra-molecular forces and molecular motors, are discussed. A detailed discussion and overview of nanofabrication technologies and approaches are also provided. Cross listed with ENGR 4210. Prerequisite: must be an engineering or science major of at least junior standing.

ENGR 3220 Introduction to Micro-Electro-Mechanical-Systems and Microsystems (4 Credits)
This course introduces students to the multi-disciplinary field of Micro-Electro-Mechanical-Systems (MEMS) technology. MEMS and Microsystems technology is the integration of micro-scale electro-mechanical elements, sensors, actuators, and electronics on a common substrate or platform through semiconductor microfabrication technologies. The course gives a brief overview of the involved physical phenomena, electromechanical transduction mechanisms, design principles, as well as fabrication and manufacturing technologies. Cross listed with ENGR 4220.

ENGR 3313 Engineering Design Project I (2 Credits)
Planning, development, and execution of an engineering design project. The project may be interdisciplinary, involving aspects of computer, electrical, and mechanical engineering. Projects have economic, ethical, social, and other constraints, as appropriate. Design activities include 1) preparation and presentation of proposals in response to requests-for-proposals from "customers," including problem description, quantitative and qualitative criteria for success, alternate designs and project plans; 2) generation and analysis of alternate designs, and choice of best design; 3) formulation of test procedures to demonstrate that the design chosen meets the criteria for success, and testing of the completed project where feasible; 4) reporting on the design and testing. Cross listed with ENGR 3314. Prerequisite: senior standing in engineering.

ENGR 3314 Honors Thesis I (2 Credits)
Honors equivalent of ENGR 3313. Required of students in the Honors Program and of students graduating summa cum laude in place of ENGR 3313. In addition to the requirements given for ENGR 3313, the student must submit a copy of the final report on the project to the engineering department. Cross listed with ENGR 3313.

ENGR 3323 Engineering Design Project II (3 Credits)
Planning, development, and execution of an engineering design project. The project may be interdisciplinary, involving aspects of computer, electrical, and mechanical engineering. Projects have economic, ethical, social, and other constraints, as appropriate. Design activities include 1) preparation and presentation of proposals in response to requests-for-proposals from "customers," including problem description, quantitative and qualitative criteria for success, alternate designs and project plans; 2) generation and analysis of alternate designs, and choice of best design; 3) formulation of test procedures to demonstrate that the design chosen meets the criteria for success, and testing of the completed project where feasible; 4) reporting on the design and testing. Cross listed with ENGR 3324. Prerequisite: ENGR 3313.

ENGR 3324 Honors Thesis II (3 Credits)
Honors equivalent of ENGR 3323. Required of students in the Honors Program and of students graduating summa cum laude in place of ENGR 3323. In addition to requirements given for ENGR 3323, the student must submit a copy of the final report on the project to the engineering department. Cross listed with ENGR 3323.
ENGR 3333 Engineering Design Project III (3 Credits)
Planning, development and execution of an engineering design project. The project may be interdisciplinary, involving aspects of computer, electrical and mechanical engineering. Projects have economic, ethical, social and other constraints, as appropriate. Design activities include: 1) preparation and presentation of proposals in response to requests-for-proposals from "customers," including problem description, quantitative and qualitative criteria for success, alternate designs and project plans; 2) generation and analysis of alternate designs, and choice of best design; 3) formulation of test procedures to demonstrate that the design chosen meets the criteria for success, and testing of the completed project where feasible; 4) reporting on the design and testing. Cross listed with ENGR 3334. Prerequisite: ENGR 3323.

ENGR 3334 Honors Thesis III (3 Credits)
Honors equivalent of ENGR 3333. Required of students in the Honors Program and of students graduating summa cum laude, in place of ENGR 3333. In addition to the requirements given for ENGR 3333, the student must submit a copy of the final report on the project to the engineering department. Cross listed with ENGR 3333.

ENGR 3350 Reliability (4 Credits)
An overview of reliability-based design. Topics include fundamentals of statistics, probability distributions, determining distribution parameters, design for six sigma, Monte Carlo simulation, first and second order reliability methods (FORM, SORM), Most Probable Point (MPP) reliability methods, sensitivity factors, probabilistic design. Cross listed with ENGR 4350.

ENGR 3510 Renewable and Efficient Power and Energy Systems (4 Credits)
This course introduces the current and future sustainable electrical power systems. Fundamentals of renewable energy sources and storage systems are discussed. Interfaces of the new sources to the utility grid are covered. Prerequisite: ENEE 2021.

ENGR 3520 Introduction to Power Electronics (4 Credits)
This covers fundamentals of power electronics. We discuss various switching converters topologies. Basic knowledge of Efficiency and small-signal modeling for the DC-DC switching converters is covered. Furthermore, magnetic and filter design are introduced. Prerequisites: ENEE 2211 and ENGR 3722.

ENGR 3525 Power Electronics and Renewable Energy Laboratory (1 Credit)
In this course the fundamentals of switching converters and power electronics in a real laboratory set-up are covered. The course incorporates hardware design, analysis, and simulation of various switching converters as a power processing element for different energy sources. The energy sources are power utility, batteries, and solar panels. Prerequisite: ENGR 3520.

ENGR 3530 Introduction to Power and Energy Conversion Systems (3 Credits)
Basic concepts of AC systems, single-phase and three-phase networks, electric power generation, transformers, transmission lines, and electric machinery. Cross listed with ENGR 4530. Prerequisite: ENEE 2021.

ENGR 3535 Electric Power Engineering Laboratory (1 Credit)
In this laboratory, the magnetic circuits, single phase transformers, power quality and harmonics synchronous machines, Induction machines and DC machines are studied and tested in a real physical setup. Prerequisite: ENGR 3530.

ENGR 3540 Electric Power Systems (4 Credits)
This course covers methods of calculation of a comprehensive idea on the various aspects of power system problems and algorithms for solving these problems. Prerequisite: ENGR 3530.

ENGR 3545 Electric Power Economy (3 Credits)
This course covers economy aspects of electric power industry and the implications for power and energy engineering in the market environment. Cross listed with ENGR 4545. Prerequisite: ENGR 3530.

ENGR 3550 Introduction to Machine Drive Control (4 Credits)
This course provides the basic theory for the analysis and application of adjustable-speed drive systems employing power electronic converters and ac or dc machines. Prerequisites: ENGR 3520 and ENGR 3530.

ENGR 3610 Engineering Analysis (3 Credits)
Applied mathematics for engineers. Generalized Fourier analysis, complex variables, vector calculus, introduction to Bessel functions, and applied probability and statistics. Cross listed with ENGR 3620. Prerequisites: MATH 2070, MATH 2080.

ENGR 3620 Advanced Engineering Mathematics (4 Credits)

ENGR 3630 Finite Element Methods (4 Credits)
Introduction to the use of finite element methods in one or two dimensions with applications to solid and fluid mechanics, heat transfer and electromagnetic fields; projects in one or more of the above areas. Prerequisite: ENGR 3610 or equivalent.

ENGR 3721 Controls (3,4 Credits)
Modeling, analysis and design of linear feedback control systems using Laplace transform methods. Techniques and methods used in linear mathematical models of mechanical, electrical, thermal and fluid systems are covered. Feedback control system models, design methods and performance criteria in both time and frequency domains. A linear feedback control system design project is required. Prerequisites: ENEE 2021, ENGR 3610 or permission of instructor.
ENGR 3722 Control Systems Laboratory (1 Credit)
This laboratory course serves as supplement to ENGR 3721. It aims at providing “hands on” experience to students. It includes experiments on inverted pendulum, gyroscopes, motor control, feedback controller design, time-domain and frequency domain. Corequisite: ENGR 3721.

ENGR 3730 Robotics (3 Credits)
Introduction to the analysis, design, modeling and application of robotic manipulators. Review of the mathematical preliminaries required to support robot theory. Topics include forward kinematics, inverse kinematics, motion kinematics, trajectory control and planning, and kinetics. Cross listed with ENGR 4730. Prerequisites: ENME 2520 and MATH 2060 or MATH 2200 or permission of instructor.

ENGR 3731 Robotics Lab (1 Credit)
Laboratory that complements the analysis, design, modeling and application of robotic manipulators. Implementation of the mathematical structures required to support robot operation. Topics include forward kinematics, inverse kinematics, motion kinematics, trajectory control and planning and kinetics. Applications include programming and task planning of a manufacturing robot manipulator. Corequisite: ENGR 3730 or permission of instructor.

ENGR 3735 Linear Systems (4 Credits)
This course focuses on linear system theory in time domain. It emphasizes linear and matrix algebra, numerical matrix algebra and computational issues in solving systems of linear algebraic equations, singular value decomposition, eigenvalue-eigenvector and least-squares problems, linear spaces and linear operator theory. It studies modeling and linearization of multi-input/multi-output dynamic physical systems, state-variable and transfer function matrices, analytical and numerical solutions of systems of differential and difference equations, structural properties of linear dynamic physical systems, including controllability, observability and stability. It covers canonical realizations, linear state-variable feedback controller and asymptotic observer design, and the Kalman filter. Cross listed with ENGR 4735. Prerequisites: ENGR 3610, ENGR 3721/3722, or permission of the instructor.

ENGR 3742 LabVIEW Programming, a primer for certification as an Applications Developer (4 Credits)
The LabVIEW course covers numeric, Boolean, and string controls; programming structures include loops, sequences, formula, and case structures. VISA (virtual instrumentation and software structure) and SCPI (standard commands for programmable instruments) are used to control test equipment and acquire data via the GPIB (general purpose interface bus, IEEE488 standard). VISA (virtual instruments) for data acquisition and analysis are developed utilizing mathematical, signal processing, and statistical LabVIEW programming modules. LabVIEW structures will be used to mathematically model and solve second order differential equations and Laplace transforms.

ENGR 3800 Topics (ENGR) (1-4 Credits)
Special topics in engineering as announced. May be taken more than once. Prerequisite: varies with offering.

ENGR 3900 Engineering Internship (0-4 Credits)
Students in engineering may receive elective credit for engineering work performed for engineering employers with the approval of the chair or associate chair of the department. At the end of the term, a student report on the work is required, and a recommendation will be required from the employer before a grade is assigned. Junior, senior, or graduate status in engineering is normally required. May not be used to satisfy technical requirements. May be taken more than one for a maximum of 6 quarter hours. Prerequisite: permission of instructor.

ENGR 3951 Engineering Assessment II (0 Credits)
Students in Mechanical Engineering must register for and take the Fundamentals of Engineering Examination (FE). All students must complete an engineering exit interview and other assessment related tasks. To be taken in the last quarter of attendance.

ENGR 3970 Entrepreneurship for Engineers and Computer Scientists (4 Credits)
The course presents an overview of fundamentals of understanding entrepreneurship and entrepreneurial characteristics; the focus is on aspects of engineering entrepreneurship, technology-based innovation and new product development. Topics to be covered: learning an industry; recognizing and creating opportunities; new product development process, phases and cycle, risks and benefits; ‘testing’ of an engineering-focused business concept; marketing, organizational plan strategies and financing for new start ups. Special attention is given to technological innovation, considering both incremental or routine innovation, and more radical or revolutionary changes in products and processes. Prerequisite: ENGR 3610 or permission of the instructor.

ENGR 3991 Independent Study (1-5 Credits)
Topics in engineering investigated under faculty supervision. May be taken more than once. Students must obtain and complete an Independent Study form from the Office of the Registrar. Prerequisite: permission of instructor.

ENGR 3992 Directed Study (1-10 Credits)
ENGR 3995 Independent Research (1-10 Credits)

Materials Science Courses
MTSC 3010 Mechanical Behavior of Materials (4 Credits)
Effects of microstructure on mechanical behavior of materials (metals, polymers, ceramics and composites); emphasis on recent developments in materials science, modulus, fracture (fracture toughness and brittle strength), fatigue, creep, wear, friction, stress rupture and deformation. Cross listed with MTSC 4010. Prerequisite: ENME 2421.

MTSC 3020 Composite Materials I (4 Credits)
MTSC 3450 Fracture Mechanics (4 Credits)
Topics include stress field at a crack tip, linear fracture mechanics, energy release rate, stress intensity factors, plastic zones, plane stress, plane strain, fracture toughness, airy stress functions, elastic-plastic fracture mechanics, J integral, crack tip opening displacements, experimental testing, fatigue, life prediction, crack closure, weight functions, failure analysis. Cross listed with MTSC 4450. Prerequisites: ENME 2421 and ENEM 2541.

MTSC 3800 Topics in Materials Science (1-5 Credits)
Various topics in materials science as announced. May be taken more than once. Prerequisite: varies with each topic.

MTSC 3992 Directed Study (1-10 Credits)

Department of English
Office: Sturm Hall, Room 495
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2266
Email: kheeps@du.edu
Web Site: http://www.du.edu/ahss/schools/english

The undergraduate mission of the English department is to help fulfill the University's commitment to provide a liberal undergraduate education and to contribute to the University's general education program. For most of its 150-year history, the academic study of English has been the study of literatures written in this language. That is, the focus of English study is on the history, production and interpretation of literature in English with accompanying emphasis on critical reception of texts, on the diverse cultures that contextualize literary writing and on other rhetorical "texts." No single perspective dominates the study of English literature and language. Recently, it has also become apparent that even predominantly English-speaking cultures are highly diverse and comprise many different cultures in different languages. In broad terms, then, the discipline of English at DU includes a) the study of the history of literature in English and in English translation; b) the production of literature as a creative act; and c) the interpretation of literature within the rhetorical context of aesthetics, which has a complex relationship to social, economic, cultural and political conditions. Like most English departments, we accommodate several different approaches to and emphases on the study of literature and the teaching of creative writing. However, the English department is united in its acceptance of these three broad activities of English study as aspects of our mission.

English

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)
Minimum of 44 credits in English; maximum of 60 credits. No more than 8 credits of coursework at the 1000 level may be taken, and at least 12 credits must be taken at the 3000 level.

The English department offers four concentrations within the English major:

 Literary Studies
This concentration is for students who wish to study the historical development of literature in English. Students explore a range of writing from medieval British to postcolonial literatures of the Americas. The program is appropriate for those who plan careers in secondary education or who plan to attend graduate school for the MA or PhD in English.

Course Requirements:
* 8 credits British Literature Survey (ENGL 2100, ENGL 2200, or ENGL 2300)
* 8 credits American Literature Survey (ENGL 2750, ENGL 2751, or ENGL 2752)
* 4 credits Shakespeare (e.g., ENGL 2221, ENGL 2220)
* 4 credits Ethnic Literature (e.g., ENGL 2742, ENGL 2715, ENGL 3744)
* 4 credits International Literature (e.g., ENGL 2544, ENGL 2613)
* 4 credits Rhetoric/Literary Theory (e.g., ENGL 2026, ENGL 2815, ENGL 3813, ENGL 3815, ENGL 3817, ENGL 3818, ENGL 3823, ENGL 3825, ENGL 3852)
* 12 credits English Electives
least two courses in both literatures. This program of study may also be appropriate for those who plan careers in secondary education or those who plan to attend graduate school for the MA or PhD in English.

Course Requirements:

* 8 credits British Literature (one course before 1789, e.g. ENGL 2100, ENGL 2200, or ENGL 2120, and one after 1789, e.g. ENGL 2300, ENGL 2401, or ENGL 2402)

* 8 credits American Literature (one course before 1900, e.g. ENGL 2750, and one after 1900, e.g. ENGL 2711)

* 4 credits Ethnic Literature (e.g., ENGL 2742, ENGL 2715, ENGL 3744)

* 4 credits International Literature (e.g., ENGL 2544, ENGL 2613)

* 8 credits Rhetoric/Literary Theory (e.g., ENGL 2026, ENGL 2815, ENGL 3813, ENGL 3815, ENGL 3817, ENGL 3818, ENGL 3823, ENGL 3825, ENGL 3852)

* 12 credits English Electives

**Creative Writing**

This concentration is for students who wish to create original works in poetry, fiction, nonfiction or translation, and who seek training from practicing writers in these areas. The program emphasizes, more than many such programs, the study of literature and theory. It is appropriate for students who plan to seek the MFA or PhD in English.

Course Requirements:

* 4 credits Introduction to Creative Writing (ENGL 1000)

* 8 credits Intermediate Creative Writing (e.g., ENGL 2001, ENGL 2010)

* 8 credits British Literature (one course before 1789, e.g. ENGL 2100, ENGL 2200, or ENGL 2120, and one after 1789, e.g. ENGL 2300, ENGL 2401, or ENGL 2402)

* 8 credits American Literature (one course before 1900, e.g. ENGL 2750, and one after 1900, e.g. ENGL 2711)

* 4 credits International Literature (e.g., ENGL 2544, ENGL 2613)

* 12 credits English Electives (one of which should be a 3000-level creative writing course, e.g. ENGL 3001 or ENGL 3010)

**English Education**

This concentration is for students who wish to teach English language and literature at the secondary school level. Students explore a range of writings from medieval British to postcolonial literatures of the Americas, and in addition take courses in language and writing. Please note: Students who want to receive teaching certification upon completion of the BA or to go on for the dual degree option in teacher education must complete all requirements for this concentration by the end of the junior year with a minimum grade point average of 3.0. In their senior year, these students must complete the 40-hour Teacher Education Program. Inasmuch as the student may take an additional 16 credits in the major beyond the 44 required credits (or a maximum of 60 credits), we highly recommend that students in English education confer with the Morgridge College of Education’s teacher education department for its recommendations on additional areas students might want or need to cover in their English major.

Course Requirements:

* 8 credits British Literature Survey (ENGL 2100, ENGL 2200, or ENGL 2300)

* 8 credits American Literature Survey (ENGL 2750, ENGL 2751, or ENGL 2752)

* 4 credits Shakespeare (e.g., ENGL 2221, ENGL 2220)

* 4 credits Ethnic Literature (e.g., ENGL 2742, ENGL 2715, ENGL 3744)

* 4 credits International Literature (e.g., ENGL 2544, ENGL 2613)

* 4 credits English Grammar or History and Structure of the English Language (e.g., ENGL 2026, ENGL 3813)

* 4 credits Advanced Writing/Nonfiction (ENGL 2816, ENGL 3015)

* 4 credits Literary Interpretation (e.g., ENGL 3823, ENGL 3825)

* 4 credits Poetry Genre (e.g., ENGL 1007, ENGL 2716, ENGL 2001)
Secondary Major

44 credits. Same requirements as for BA degree.

Minor Requirements

Students minoring in English must take a minimum of 24 credits in English. No specific courses are required; students are encouraged to design a minor that reflects their interests. No more than 8 credits may be taken at the 1000 level. Minimum GPA in the minor is 2.0.

Courses

**ENGL 1000 Introduction to Creative Writing (4 Credits)**
Basic techniques of fiction and poetry.

**ENGL 1006 Art of Fiction (4 Credits)**
An introduction to the appreciation of fiction as an art form through practice in interpretation and creation.

**ENGL 1007 Art of Poetry (4 Credits)**
An introduction to the appreciation of poetry as an art form through practice in interpretation and creation.

**ENGL 1008 Art of Drama (4 Credits)**
An introduction to the appreciation of drama as an art form through practice in interpretation and creation.

**ENGL 1009 Art of Non-fiction (4 Credits)**
An introduction to the appreciation of non-fiction as an art form through practice in interpretation and creation.

**ENGL 1010 Introductory Topics in English (4 Credits)**
Various topics in literary studies approached at the introductory level.

**ENGL 1110 Literary Inquiry (4 Credits)**
Literary Inquiry introduces students to the variety of ways that poetry, fiction, and/or drama expand our understanding of what it means to be human. Topics vary to engage students in the rewarding process of interpreting the literary art form as a unique cultural expression. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**ENGL 1992 Directed Study (1-10 Credits)**

**ENGL 2001 Creative Writing-Poetry (4 Credits)**
Techniques and forms of poetry. Prerequisite: an introductory creative writing course.

**ENGL 2002 Creative Writing-Poetry (4 Credits)**
Techniques and forms of poetry. Prerequisite: an introductory creative writing course.

**ENGL 2003 Creative Writing-Poetry (4 Credits)**
Techniques and forms of poetry. Prerequisite: an introductory creative writing course.

**ENGL 2004 Magical Realism in Literature and Cinema (4 Credits)**
This course examines the relationships between human groups and their social and aesthetic environments through the conjunction of history and myth or magical realism. We study magical realism both as auctorial flights of the imagination based on alternative ways of seeing and telling as well as a community-inspired idiom shaped by a reperception of history and the environment. Our study is region-specific in sociocultural details as well as global in scope and involves the exploration of magical realism in literature and cinema. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**ENGL 2010 Creative Writing-Fiction (4 Credits)**
Techniques and forms of fiction. Prerequisite: an introductory creative writing course.

**ENGL 2011 Creative Writing-Fiction (4 Credits)**
Techniques and forms of fiction. Prerequisite: an introductory creative writing course.

**ENGL 2012 Creative Writing-Fiction (4 Credits)**
Techniques and forms of fiction. Prerequisite: an introductory creative writing course.

**ENGL 2013 Creative Writing-Fiction (4 Credits)**
Techniques and forms of fiction. Prerequisite: an introductory creative writing course.

**ENGL 2020 Studies in Non-Fiction (4 Credits)**

**ENGL 2026 English Grammar (4 Credits)**

**ENGL 2031 Poetry Since 1945 (4 Credits)**

**ENGL 2035 History of Genre-Poetry (4 Credits)**

**ENGL 2036 History of Genre-Fiction (4 Credits)**

**ENGL 2040 Introduction to Publishing (4 Credits)**
Through lectures and field trips, students will learn how books get published - with all the steps involved. Cross listed with ENGL 3040, MFJS 3140.
ENGL 2060 Modern/Post Modern Literature (4 Credits)

ENGL 2070 Postcolonial Literature and Theory (4 Credits)
An examination of the phenomenon of postcolonialism, taking into account the ways in which it has been conceptualized. Key interests include the contexts of imperialism and decolonization as well as critical readings of pertinent literature.

ENGL 2080 London as Global City: From Empire to Commonwealth (4 Credits)
London as Global City is designed to accommodate the newly structured London Program for Fall 2011. It entails biweekly meetings and site visits for 14 weeks and examines the origins of the British Empire, starting with the founding of the East India Company in 1600 and moving to 21st century London as a repository of peoples from across the globe, particularly descendants of former British colonies in India, Africa and the West Indies. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2100 English Literature I: Beowulf-Spenser (4 Credits)
A survey of English literature from the earliest extant texts through works written in the late 16th century, ending with Spenser. Its purpose is to give students a historical grasp of the development and continuity of English literature during the Middle Ages and the 16th century. Old English and most Middle English texts will be read in translation, but Chaucer and Middle English lyrics will be read in the original.

ENGL 2104 The Bible as Literature (4 Credits)
The Bible has been one of the most important works in all of Western society. In this course we read the Bible as a masterpiece of literature. Rather than focusing on theological questions about this work as inspired scripture, we instead focus on its rich literary qualities and explore some ways in which these stories have influenced modern society. Reading select passages, we discuss its literary genres, forms, symbols and motifs, many of which are important in literature today. Of the latter, we encounter stories of creation and hero tales, parables, apocalyptic literature, and themes of paradise and the loss of Eden, wilderness, covenant, and the promised land. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2104 and JUST 2104.

ENGL 2120 Chaucer-Selected Poetry (4 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2125 Arthurian Literature (4 Credits)
Building upon Malory's classic Arthurian cycle, this course will follow the major developments in the legend of Arthur into the 20th century.

ENGL 2130 World Literature (4 Credits)
A literary journey around the world, the focus of this course includes the study of modern literature from different parts of the world--such as Africa and the Caribbean, Asia and the Middle East, Europe and the Americas. Textual analysis as well as cultural and transnational contexts are emphasized. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2200 English Literature II: Donne-Johnson (4 Credits)
This course explores the literatures of the 17th and 18th centuries. This 200-year period marks England's transition from a medieval, relatively static society bound by hierarchy, religion and shared cultural values into a restless early-modern society of cities, social mobility, civic unrest, colonies and cosmopolitanism. Students work on understanding genres and styles, the basics of scansion, and the terminologies, methods and ideologies of literary criticism. The course is divided into generic categories.

ENGL 2202 Renaissance Poetry & Prose (4 Credits)

ENGL 2210 Shakespeare-Representative Plays (4 Credits)
Introduction covering about eight plays and some sonnets.

ENGL 2221 Shakespeare Seminar (4 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2230 Shakespeare and Film (4 Credits)
An examination of film adaptation and staging of Shakespeare's plays. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2300 English Literature III (4 Credits)
Final third of English literature survey; major British authors and movements from romantic to modern in their historical context. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2311 English Novel to 1800 (4 Credits)

ENGL 2401 Blake, Wadsworth and Contemporaries (4 Credits)
The first generation of British Romantic writers came of age during a time of revolution (American, French, Haitian). The inheritors of radical eighteenth-century ideas about natural rights, the first-generation Romantics found optimism in human feeling as well as human reason. They believed that the capacity for sympathy and lyrical transport would lead to a new, benevolent society, but their belief in social progress was checked by revolutionary violence and the rise of a hyper-rationalism that seemed more dangerous than the superstition it was meant to replace.

ENGL 2402 Later Romantics (4 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2536 Shakespeare Plays in London (4-4.5 Credits)
Cross listed with THEA 2220.
ENGL 2544 Globalization and Cultural Texts (4 Credits)
The focus of this course is on theory (drawn from the social sciences) of how cultures worldwide may be increasingly internationalized through the powerful effects of globalization and on cultural texts that present the human and aesthetic faces of globalization, as seen through literature and film, with particular reference to India, the United Kingdom, South Africa, and Japan. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2613 Excavating Italy (4 Credits)
This class provides an introduction to the art, history and literature of the Italian cities of Rome, Florence and Venice from classical antiquity through the High Renaissance, as well as visual and literary responses to Italy, by artists and writers. Students are encouraged to recognize the importance of classical architecture and sculpture as the artistic precedents for Renaissance art. We see how religious and literary themes provided much of the iconography of Renaissance painting. Students are also encouraged to become intimately acquainted with the works of a few selected major artists, such as Giotto, Botticelli, and Michelangelo, while also developing a wider understanding of the general stylistic features of Italian Renaissance art. The literature component focuses on a variety of genres from classical texts to Shakespeare’s Italian plays to British travelers’ impressions of Italian artists and scenes. This is a team-taught course. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ARTH 2613.

ENGL 2705 Literature of the American South (4 Credits)
ENGL 2706 Writing the American West (4 Credits)
ENGL 2707 Contemporary Literature (4 Credits)
The course surveys contemporary books. The novel has never been a coherent genre, but especially since the 1960s its features, in some practitioners, have begun to resemble history, anthropology, poetry, science writing, or all of these. The course will include readings from Asia, South America, Europe and North America.

ENGL 2708 Topics in English (1-4 Credits)
ENGL 2709 Topics in English (1-10 Credits)
ENGL 2710 American Novel-19th & 20th Century (4 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2711 20th Century American Fiction (4 Credits)
Students read, evaluate and discuss the genre of the American immigrant novel. Topics include how this is a uniquely American literary form and what it says about life in America; the similarities and differences in how ethnic groups understand their experiences; how language and narrative techniques are used to convey the life of a new immigrant; how the experiences of men and women differ; how the immigrant novel has evolved as a literary genre. The readings will be analyzed as a means to consider how the immigration novel in America became a genre that expressed a variety of topics related to the American experience. The class will consider how these works helped to shape and define what it meant to be an American, and how that definition has changed over the last 100 years.

ENGL 2712 American Short Story (4 Credits)
Wide range of American short stories, quintessential American genre, from the early 19th century to present.

ENGL 2715 Native American Literature (4 Credits)
Native American Literature explores the relationships between contemporary Native American narratives and Native American oral traditions. We will examine the intellectual underpinnings of Native American literary expressions, focusing on tribally specific Native American concepts of language, perception, and process in relation to Native cultural and political survival. This course aims to celebrate Native American cultural expression through lectures and discussion, group work and intellectual exercises.

ENGL 2716 American Poetry (4 Credits)
ENGL 2717 African American Writers (4 Credits)
Defines, describes and analyzes the African-American aesthetic.

ENGL 2741 American Jewish Literature: Immigrant Fiction (4 Credits)
This course surveys over 100 years of American Jewish immigrant narratives beginning with the great exodus of Eastern European and Russian Jewry at the end of the 19th century and ending with recent arrivals from Israel and the former U.S.S.R. Canonical works by central authors reveal the great successes of Jewish immigrants alongside their spiritual failures. A selection of memoir, novels, short stories, and poetry in English and in translation from Hebrew and Yiddish demonstrate the multilingual character of the Jewish experience in America. While helpful, no knowledge of Jewish languages, religious tradition, or cultural practice is necessary to succeed in this course. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2741.

ENGL 2742 Modern Hebrew Literature in Translation: Against All Odds (4 Credits)
This course offers a survey of some of the most significant works of modern Hebrew literature available in translation. Students will consider how the development of Hebrew literature has contributed to the formation of contemporary Israeli identity, and how the conflicts that define the turbulent history of Israel are treated in works by canonical authors. The selection of diverse voices and literary materials exposes students to the social, political, and historical changes wrought by the rise of modern day Israel. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2742.
ENGL 2743 Jewish Humor: Origins and Meaning (4 Credits)
Writers, scholars, and comedians all claim to locate an identifiable strain of “Jewish humor” running from the Bible through to today’s literary humorists and provocative stand-up comics. This course takes humor seriously in an effort to reveal the development of “Jewish humor” in American from a comparative context. But is there such a thing as Jewish humor? And if so, what are its sources and characteristics? Does it exist across cultures and in different linguistic communities? Through lectures, discussion, exercises and papers, students gain a broad understanding of the history, psychology, and philosophy of humor as it relates to Jewish arts and letters in America. This course is cross-listed with JUST 2743.

ENGL 2750 American Literature Survey I (4 Credits)
First part of American survey; introduction to major authors and genres.

ENGL 2751 American Literature Survey II (4 Credits)
Second part of American survey; further examination of major authors and genres.

ENGL 2752 American Literature Survey III (4 Credits)

ENGL 2750 American Literature Survey I (4 Credits)

ENGL 2751 American Literature Survey II (4 Credits)

ENGL 2752 American Literature Survey III (4 Credits)

ENGL 2750 American Literature Survey I (4 Credits)

ENGL 2751 American Literature Survey II (4 Credits)

ENGL 2752 American Literature Survey III (4 Credits)

ENGL 2815 Studies in Rhetoric (4 Credits)

ENGL 2816 Advanced Writing (4 Credits)
This class gives each student the opportunity to explore the humanities in an area of his or her particular interest. A research methods and writing course, this class guides students through the research and writing process from preliminary research to methodology to prospectus to drafting and finally revision. Class sessions operate as directed writing workshops, with students discussing their research and writing strategies. The final product of the course is a 15-page research essay on a subject of the student’s choice. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ENGL 2820 Philosophy and Literature (4 Credits)
Hermeneutics, sometimes called “the art of interpretation,” offers us the opportunity to explore strategies of engagement and exegesis that seeks to observe, question, and celebrate the ways in which we read and write the world. By bringing critical and creative inquiry to bear on the event of interpretation itself we can consider the ethical implications of how we deal with our individual identities as well as our collective, national, and global identities. In this course we pose big questions—What are we talking about when we talk about existence? What does it mean to have a body? How does desire and memory construct history and identity? Walking these questions through a variety of literary and philosophical texts and artistic lenses, we consider how “the creative” (writing, the literary) performs, becomes, and is “the critical” and vice-versa. Students should be prepared to write, read, and participate in discussion.

ENGL 2825 Cultural Criticism (4 Credits)
This course will introduce students to some of the major moments in the development of cultural studies and will show how the discipline “works” to make sense of culture at large. Cross listed with ENGL 3825.

ENGL 2830 Representations of Women (4 Credits)
Consideration of images presented of and by women in works of English and American literature from Middle Ages to present. Cross listed with GWST 2830.

ENGL 2845 Politics and Literature (4 Credits)

ENGL 2880 Internship in English (1-5 Credits)
This course provides academic credit for off-campus internships in fields related to the English major. One paper is required at the end, articulating how the internship complemented the student’s studies in English. Requires approval by director of undergraduate studies in English.

ENGL 2992 Directed Study (1-10 Credits)

ENGL 3000 Advanced Creative Writing—Poetry (4 Credits)
Technique, writing practice and criticism.

ENGL 3001 Advanced Creative Writing—Poetry (4 Credits)
Technique, writing practice and criticism.

ENGL 3002 Advanced Creative Writing—Poetry (4 Credits)
Technique, writing practice and criticism.

ENGL 3003 Advanced Creative Writing—Poetry (4 Credits)
Technique, writing practice and criticism.

ENGL 3010 Advanced Creative Writing—Fiction (4 Credits)
Technique, writing practice and criticism.

ENGL 3016 Advanced Creative Writing—Fiction (4 Credits)
Technique, writing practice and criticism.

ENGL 3012 Advanced Creative Writing—Fiction (4 Credits)
Technique, writing practice and criticism.

ENGL 3013 Advanced Creative Writing—Fiction (4 Credits)
Technique, writing practice and criticism.
ENGL 3015 Advanced Creative Writing: Non-Fiction (4 Credits)

ENGL 3017 Travel Writing-Fiction & Fact (4 Credits)
A study of European, American and other narratives of travel. This course examines relevant postcolonial and literary theories of travel and nationhood.

ENGL 3040 Introduction to Publishing (4 Credits)
Cross listed with ENGL 2040, MFJS 3140.

ENGL 3101 Non-Chaucerian Middle English Literature (4 Credits)
A study of Chaucer's near-contemporaries, Gower, Langland, and the Pearl poet as well as drama and lyrics.

ENGL 3121 Chaucer: Canterbury Tales (4 Credits)
Life, culture, language and literary trends of Chaucer's age as reflected in "The Canterbury Tales".

ENGL 3200 Oral Literature and Orality in Literature (4 Credits)
The term "oral literature" generally refers to narratives and poems--including songs--performed and disseminated orally from one generation to the other. Oral literature is, in some respects, the foundational 'text' of written literature. Some of the questions that we therefore explore in this course are as follows: How did oral literature develop? What are its types and their characteristics? How has oral literature been shaped by time and place? How is it distinct from as well as related to written literature? To answer these questions, we explore different forms of oral literature--from the traditional (such as folklore) to the contemporary (such as spoken word poetry). We also study the use of orality as a literary device in written literature. Our studies involve the examination of material and texts from different parts of the world.

ENGL 3402 Early Romantics (4 Credits)

ENGL 3404 England and Empire: Ambivalent Imperialism in Victorian and Edwardian Literature (4 Credits)
A course investigating the literary accounts of and responses to British imperialism in Victorian and Edwardian England in which students read works by Conrad, Kipling and Forster as well as several 20th-21st works by post Commonwealth authors in London.

ENGL 3405 Postmodern Visions of Israel (4 Credits)
This course investigates how representation of Israel as a modernist utopia have been replaced in contemporary literature with images of Israel as a dystopia. The class discusses the historical context that gave rise to visions of an idealized Israel, and the role the Hebrew language played in consolidating and connecting narration to nation. Next the class considers how belles-lettres from recent decades have reimagined Israel as a series of multilingual “multiverses.” A selection of fiction translated from Hebrew forms the core of class reading. Theoretical exploration of postmodernism help us conceptualize the poetics of postmodern literature. No knowledge of Israeli history or Jewish culture is necessary to succeed in this course. Cross listed with JUST 3405.

ENGL 3706 Writing the American West (4 Credits)
Explores historical and contemporary writing produced in and about the American West.

ENGL 3711 20th-Century American Fiction (4 Credits)

ENGL 3731 Topics in English (1-4 Credits)
ENGL 3732 Topics in English (1-4 Credits)
ENGL 3733 Topics in English (1-4 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

ENGL 3743 Modern Jewish Literature (4 Credits)
Stories, novels and memoirs by 20th-century Jewish writers; consideration of issues of generation, gender and idea of Jewish literature as a genre. Cross listed with JUST 3743.

ENGL 3744 African American Literature (4 Credits)

ENGL 3800 Bibliography/Research Method (4 Credits)

ENGL 3803 Modernism/Postmodernism (4 Credits)

ENGL 3813 History and Structure of the English Language (4 Credits)
A composite course studying both the structure of modern English and the history of the English language.

ENGL 3821 Literary Criticism: 19th Century-Present (4 Credits)
Critical methods and philosophies of 19th-century critics; their relationship to traditions.

ENGL 3812 Literary Criticism: 20th Century (4 Credits)
Critical methods and philosophies of 20th-century critics; their relationship to traditions.

ENGL 3823 Interpretation Theory (4 Credits)

ENGL 3825 Cultural Criticism (4 Credits)
Cross listed with ENGL 2835.
ENGL 3852 Topics in Poetics (4 Credits)

ENGL 3982 Writers in the Schools (2,4 Credits)
This course operates mostly "in the field." Following the models of California Poets in the Schools and Teachers & Writers Collaborative, students are in training with a poet-in-residence, observing him as he conducts a residency in a public school. In addition, we have our own meetings to discuss pedagogy, classroom practices and management, teacher-writer relations, and all other necessary logistical planning. Placement in public schools is facilitated by Denver SCORES, an education program dedicated to increasing literacy in Denver's at-risk school population. For those wishing to work with middle or high school students, or in other community settings (e.g., homeless or women's shelters), special arrangements can be made. This course is a collaborative effort between CO Humanities, Denver SCORES, and the University of Denver.

ENGL 3991 Independent Study (1-17 Credits)
ENGL 3992 Directed Study (1-10 Credits)
ENGL 3995 Independent Research (1-10 Credits)

Department of Finance

Office: Daniels College of Business, Room 555
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-3322
Web Site: http://daniels.du.edu/faculty-research/reiman-school-of-finance

The program in finance is a broad area of study directed toward the financial elements of business organizations and government units, focusing on investments, corporate finance, financial institutions and international finance. Courses in these areas prepare students for careers in business finance, investment analysis and financial institutions.

Finance

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 36 credits; maximum of 45 credits. Requirements include the following:

Required Courses
FIN 3110 Financial Institutions 4
FIN 3200 Corporate Financial Problems 4
FIN 3300 Investments 4
FIN 3410 Multinational Financial Management 4
ACTG 3220 Understanding Financial Statements 4

Electives
Select four Finance electives. 16

Total Credits 36

Minor Requirements

The Finance minor is available only to students pursuing a major in the Daniels College of Business.

16 credits, including the following:

Required Courses
FIN 3110 Financial Institutions 4
FIN 3200 Corporate Financial Problems 4
FIN 3300 Investments 4

Elective
Select one Finance elective. 4

Total Credits 16
Courses

FIN 1992 Directed Study (1-4 Credits)

FIN 2010 Survey in Finance (4 Credits)
Introduces basic concepts, financial principles and analytical skills for non-business majors. Students gain an appreciation of how markets, investments and financial management are interrelated, and methods for basic financial decisions in both business and personal life. Prerequisites: sophomore standing, ACTG 2010, LGST 2000 and BUS 1000.

FIN 2800 Financial Decision Making (4 Credits)
Basic financial principles and analytical skills including ratio analysis, breakeven analysis and leverage, net present value, internal rate of return, and standard forecasting techniques. Prerequisites: ACTG 2200 and degree checkpoint 1.

FIN 2900 Managing Your Financial Affairs (4 Credits)
This course provides an overview of topics that are critical to lifetime personal financial planning. The premise of the course is that personal financial planning starts early in life and especially as a new college graduate begins a professional career. The main topics in the course include Principles of Taxation, Basics of Estate Planning, Lifetime Asset Allocation, Principles of Insurance, Proper Debt Management, the Real Estate Housing Decision, and College Financial Planning for Children. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 2992 Directed Study (1-4 Credits)

FIN 3000 Mathematics in Finance (4 Credits)
This course is a continuation of the basic calculus course focusing on multivariate differential calculus and an introduction to linear algebra. Students are given a rigorous introduction to multivariate calculus and linear algebra with emphasis on applications of these topics to finance. Modern finance is a quantitative discipline and students need an understanding of partial derivatives and linear algebra to succeed in their careers. Some examples of the financial applications students learn include finding hedge ratios; minimum-variance portfolio weights; valuing financial and real options; deriving option price sensitivities; deriving duration and convexity on a bond; capital structure and dividend theories; and regression analysis, to name just a few. For Finance majors who started at DU in autumn 2012 or later only. Prerequisite: MATH 1200 or MATH 1951.

FIN 3110 Financial Institutions (4 Credits)
Analysis of financial markets institutions and how they operate within the markets. Management of commercial banks and other financial institutions and relationship to money and capital markets. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 3120 Commercial Bank Management (4 Credits)
Comprehensive view of banking and changing environment banks operate in; developing solutions to current bank management problems. Prerequisites: FIN 3110 and degree checkpoint 2.

FIN 3200 Corporate Financial Problems (4 Credits)
Advanced application of financial decision making in areas of valuation, dividend policy, working capital, capital budgeting, cost of capital, leasing and special types of financing. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 3210 Corporate Financial Theory (4 Credits)
Expansion of FIN 3200 to include mergers and acquisitions, risk analysis, valuation and capital structure, corporate financial planning, and financial applications of decision theory. Prerequisites: FIN 3200 and degree checkpoint 2.

FIN 3230 Entrepreneurial Finance (4 Credits)
Financial planning for new and small businesses; emphasis on the new enterprise, funds acquisition and valuation. Prerequisites: FIN 3200 and degree checkpoint 2.

FIN 3300 Investments (4 Credits)
Survey of marketable securities, markets, regulation, and risk and return measurement with introduction to fundamental and technical analysis. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 3310 Analysis of Securities (4 Credits)
Analysis, valuation and selection of equity securities. Prerequisites: FIN 3300 and degree checkpoint 2.

FIN 3340 Fixed Income Securities (4 Credits)
Analysis and valuation of various types of fixed income securities. Prerequisites: FIN 3300 and degree checkpoint 2.

FIN 3410 Multinational Financial Management (4 Credits)
Survey and analysis of financial management within and among multinational corporations; Eurodollars, Euromarkets and foreign currencies. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 3500 Financial Modeling (4 Credits)
Use of Excel functions and macros to construct financial models from corporate finance, investments and financial markets. Prerequisites: FIN 3200, FIN 3300 and degree checkpoint 2.

FIN 3610 Financial Forecasting (4 Credits)
Methods of forecasting both economic and financial variables; emphasis on techniques used by business forecasters. Cross listed with STAT 3620, STAT 4783. Prerequisites: FIN 2800 and degree checkpoint 2.

FIN 3700 Topics in Finance (4 Credits)
Exploration of various topics and issues related to finance. Prerequisites: instructor's permission and degree checkpoint 2.
**First-Year Seminar**

First-Year Seminars are designed to provide students with an in-depth academic experience that will be rigorous and engaging. Students develop the kinds of academic skills that prepare them for successful college work, which might include one or more of the following:

- critical reading and thinking
- writing and discussion
- quantitative reasoning
- argument and debate

Faculty members teach their passions in which they have particular expertise and enthusiasm, and each First-Year Seminar has a unique topic, with 80–85 different First-Year Seminars offered each fall quarter. For students to be able to engage with faculty in the exploration of these topics is an extraordinary opportunity for academic and personal growth. Instructors of the First-Year Seminars also serve as students’ academic advisors and faculty mentors for the entire first year. Students meet individually with their mentors during winter and spring quarters for advising and registration help. This course must be taken at the University of Denver. Any student who either withdraws from or fails the First-Year Seminar must meet the requirement through an additional Advanced Seminar course. Students transferring to DU are exempt from this requirement if they are classified as a transfer student.

**Courses**

**FSEM 1110 First Year Seminar: Enhancing Speaking Skills for International Students (4 Credits)**

This course introduces undergraduate first-year international students to academic culture. In addition, the course introduces some aspects of American cultural ideals and values as they pertain to academic life. Many first-year undergraduate students face challenges with course work, balancing academic and campus life. The demands can be much more intense for first-year undergraduate international students, who navigate all the same issues while in a foreign culture. The instructors in these courses are sensitive to the demands placed on international students, and serve as formal advisors to the students in this course. In this class, students are challenged to participate as members of an intellectual community. The course work is designed to improve critical thinking skills and logical reasoning through impromptu and prepared discussion as well as classroom presentations. Students are expected to read articles and watch video outside class, refer to assigned texts during class discussion, synthesize ideas from course materials, and state and support their personal ideas regarding course topics. Must be a first-year international student to enroll in this course.

**FSEM 1111 First Year Seminar (4 Credits)**

First Year Seminar topics reflect the intellectual passions of the faculty who lead them. Seminars introduce students to the rigorous academic expectations of university-level work; as small, highly interactive courses, they help students improve skills in one or more of the following areas: writing, quantitative reasoning, critical thinking, presentation and argument, and/or information literacy. The instructor of the seminar serves as the student’s academic advisor and mentor for the student’s entire first year. This course is required for all first-year students.
### Gender and Women's Studies

Office: Sturm Hall, Room 419  
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208  
Phone: 303-871-4419  
Email: gwst@du.edu (gwst@du.edu?subject=website inquiry)  
Web Site: http://www.du.edu/ahss/gwst

The Gender and Women's Studies Program offers a cross-disciplinary undergraduate major and minor composed of courses taught throughout the University by a diverse faculty. Reflecting the vitality of recent feminist, ethnic and queer scholarship, these courses examine the roles of gender, race and sexualities in the lives of all people. The mission of the Gender and Women's Studies program is to explore gender as a primary category of analysis for the understanding of individuals and human societies in historical and cultural contexts.

The baccalaureate degree in gender and women's studies is a cross-disciplinary major with a minimum of 40 credits. In addition to the 40 credits, all students must take GWST 1112 Introduction to Gender and Women's Studies.

Seniors are also required to fulfill a four credit GWST capstone course. The remaining number of credits to get a student to 40 credit hours are taken from a combination of gender and women's studies courses and cross-listed courses in other departments.

A minor in gender and women's studies requires 20 credits, in addition to GWST 1112 Introduction to Gender and Women's Studies. The remaining hours may be selected from other gender and women's studies courses, including the colloquia, and courses in other departments also listed with the Gender and Women's Studies Program.

### Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

A minimum of 40 credits of Gender and Women's Studies and GWST 1112 Introduction to Gender and Women's Studies. Required courses* include, but are not limited to, the following:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Participation in Colloquium</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWST 3950 Theories in GWST</td>
<td>GWST 2981 Colloquium in GWST</td>
</tr>
<tr>
<td>GWST 2982 Colloquium in GWST</td>
<td></td>
</tr>
</tbody>
</table>

Select one course from each of the four following areas:

- **History**
  - GWST 2215 Selling Sex, Gender and the American Dream: 1950 - Present
  - GWST/ANTH 3130 The Archaeology of Gender
  - GWST/ARTH 3871 Women in Art
  - GWST/ARTH 3873 The Goddess in Art

- **Identity and Rhetoric**
  - GWST/COMN 1015 Voice and Gender
  - GWST 2212/COMN 2210 Gender, Communication, Culture
  - GWST/ENGL 2830 Representations of Women
  - GWST/MFJS 3203 Women and Film

- **Institutions and Power**
  - GWST 2210/SOCI 1810 The Family
  - GWST/SOCI 2220 Sociology of Childhood
  - GWST/SOCI 2420 Social Inequality
  - GWST/SOCI 2730 Men and Women in Society
  - GWST/SOCI 2785 Family and the Law

- **Intersectionality**
  - GWST 2230 Gender in a New Era of Empire
  - GWST/COMN 3050 Feminism and Intersectionality
  - GWST/JUST/RLGS 3740 Bodies and Souls
Capstone Requirement
GWST 3975 Capstone Seminar 1

Electives
Any Gender and Women's Studies listed or also-listed course

Total Credits
40

* Please consult with your GWST advisor and the schedule of classes for additional courses which may meet these requirements.

1 Must be a senior.

Secondary Major Requirements
40 credits. Same requirements as for BA degree.

Minor Requirements
20 credits in Gender and Women's Studies, in addition to GWST 1112 Introduction to Gender and Women's Studies.

Courses
GWST 1015 Voice and Gender (4 Credits)
In this course, students explore gender in personal and political contexts with the intent of developing their individual voices in these arenas. Students learn to express creatively their voice through strengthening both their written and oral communication skills. The course also discusses gender issues prevalent in today's society and significant moments in rhetorical history that have impacted these issues. Cross listed with COMN 1015.

GWST 1112 Introduction to Gender and Women's Studies (4 Credits)
This course provides an introduction to the discipline of gender and women's studies. All cultures engage in a complex process of assigning cultural values and social roles which vary according to the cultural environment in which human interaction occurs. Among these, the process of translating biological differences into a complex system of gender remains one of the most important. Gender and women's studies aims to understand how this process of 'gendering' occurs, and its larger effects in society. This course also explores how this system of meaning relates to other systems of allocating power, including socioeconomic class, social status, ethnicity, religion, sexuality, and nationality. Using this lens, this course explores contemporary social developments and problems. Gender and women's studies is about studying, but it is also about meaningful engagement with the world. This class presents students with a variety of types of texts from sociological articles to literary fictions and documentary and fictional cinema to explore gender from many different directions. This course counts toward the Scientific Inquiry: Society and Culture requirement.

GWST 2210 The Family (4 Credits)
Emphasis on different kinds of families and on contemporary issues of changing gender roles, intimacy, childbearing, family breakup and reconstitution, and family's relationships with other social institutions. Cross listed with SOCI 2210. Prerequisite: SOCI 1810.

GWST 2212 Gender, Communication, Culture (4 Credits)
This course considers how gender is created, maintained, repaired, and transformed through communication in particular relational, cultural, social, and historical contexts. This course is designed to help students develop thoughtful answers to the following questions: what is gender, how do we acquire it, how do cultural structures and practices normalize and reproduce it, and how do we change and/or maintain it to better serve ourselves and our communities? Throughout the term, the class explores how dynamic communicative interactions create, sustain, and subvert femininities and masculinities “from the ground up.” This course counts toward the Analytical Inquiry: Society and Culture requirement. This course is cross-listed with COMN 2210.

GWST 2215 Selling Sex, Gender and the American Dream: 1950 - Present (4 Credits)
This introductory course analyzes how commercial culture has evolved into the defining cornerstone of American life over the last sixty years. The first half of the quarter will examine the key historical movements including the Cold War, the Civil Rights/Women's and Gay Liberation movements and investigate how women, ethnic minorities, and members of the LGBTQ community evolved into important "consumer citizens" in the United States. The second half of the quarter will examine these same social groups from a contemporary perspective, and the degree that globalization, "multiculturalism" and "going green" have emerged as dominant tropes in contemporary culture. By moving from past to present, students will gain an understanding of the complex connections between consumption and U.S. nation-building, as well as the consequences "shopping" and the accumulation of "stuff" has had in both the shaping and reconfiguring understandings of what it means to live the “American Dream.” This course counts toward the Analytical Inquiry: Society and Culture requirement. This course is cross-listed with COMN 2210.

GWST 2220 Sociology of Childhood (4 Credits)
This introductory course analyzes how commercial culture has evolved into the defining cornerstone of American life over the last sixty years. The first half of the quarter will examine the key historical movements including the Cold War, the Civil Rights/Women's and Gay Liberation movements and investigate how women, ethnic minorities, and members of the LGBTQ community evolved into important "consumer citizens" in the United States. The second half of the quarter will examine these same social groups from a contemporary perspective, and the degree that globalization, "multiculturalism" and "going green" have emerged as dominant tropes in contemporary culture. By moving from past to present, students will gain an understanding of the complex connections between consumption and U.S. nation-building, as well as the consequences "shopping" and the accumulation of "stuff" has had in both the shaping and reconfiguring understandings of what it means to live the “American Dream.” This course counts toward the Analytical Inquiry: Society and Culture requirement. This course is cross-listed with COMN 2210. Prerequisite: SOCI 1810.

GWST 2220 Sociology of Childhood (4 Credits)
This course explores the social meanings of childhood. In this course we will examine aspects of the symbolic meanings of childhood as well as the experiences of being a child. The commercialization of childhood through marketing to children, contradictory messages about children as innocent or problematic, the experience of gender socialization for children, and the expectations of creating perfect children will be explored in detail. Cross listed with SOCI 2220. Prerequisite: SOCI 1810.
GWST 2230 Gender in a New Era of Empire (4 Credits)
This course examines the concept of empire in the 21st-Century through a transnational feminist analysis of international state politics, corporate globalization, and cultural imperialism, focusing on how these forces have converged to move people, ideas, and ideologies across and between state borders in recent years. Emphasizing the cultural dimensions of imperialism, it explores how new forms of commercial empire and militarism rely upon and influence gendered, sexed, raced, and national identities, differences, and inequities across the globe, as well as racial, gendered, and sexual modes of conquest and imperialism. Prerequisite: GWST 1112: Introduction to Gender and Women's Studies, or instructor permission.

GWST 2280 Gender in the Economy (4 Credits)
This course moves beyond the traditionally male-dominated view of the economy to explore economic life through a gendered lens. A gendered perspective challenges us to see economic theory, markets, work, development, and policy in new ways. Gendered economic analysis expands the focus of economics from strictly wants, scarcity, and choice to include needs, abundance, and social provisioning in its scope. Cross listed with ECON 2280. Prerequisite: ECON 1020.

GWST 2420 Social Inequality (4 Credits)
Dimensions of social class and its effect on economic, political and social institutions as well as style of life. Cross listed with SOCI 2420.

GWST 2500 Biology of Women (4 Credits)
General overview of basic biological concepts that describe cell function, hormone action, and sexual development and function. Suitable for major and nonmajors alike. Cross listed with BIOL 2500, WSTU 0500.

GWST 2565 Men and Masculinities (4 Credits)
Many of us believe that anatomy is what determines our behavior and that our bodies dictate our social and psychological temperament. Looking specifically at men and masculinities, this course tests that general notion, investigates the various ways male behavior is gendered and critically explores the meanings of masculinity in contemporary institutions. Throughout the course, we look at the multidimensional and multicultural ways masculinity is produced, constructed, enacted, and resisted; how masculinities structure power and resources; and how masculinities benefit, regulate, and hurt men’s lives. Cross-listed with SOCI 2565. Prerequisite: SOCI 1810 or permission of instructor.

GWST 2630 American Women’s History (4 Credits)
This course is a survey of American women’s history from the colonial period to the present. It examines the social, cultural, economic, and political developments shaping American women's public and private roles over several centuries, in addition to the ways in which women gave meaning to their everyday lives. Particular attention is paid to the variety of women's experiences, with an emphasis on the interplay of race, class, ethnicity, and sexuality. Cross listed with HIST 2630.

GWST 2700 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 2701 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 2702 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 2703 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 2704 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 2730 Men and Women in Society (4 Credits)
How the biological fact of sex is transformed into socially created gender roles. How individuals learn they are male and female, and how their behaviors are learned. A look at gender distinctions built into language, education, mass media, religion, law, health systems and the workplace. Cross listed with SOCI 2730. Prerequisite: SOCI 1810.

GWST 2765 The Female Offender (4 Credits)
Female offenders are one of the fastest growing segments in both the juvenile and adult justice systems. This course introduces students to debates and issues surrounding girls, women, and crime; explores different theoretical perspectives of gender and crime; and examines the impact of gender on the construction and treatment of female offenders by the justice system. In addition, this course specifically looks at girls’ and women's pathways to offending and incarcerations; understanding girls’ violence in the inner city; exploring the reality of prison life for women, with a particular focus on the gender-sensitive programming for incarcerated mothers; and ending with an examination of how capital punishment has affected women offenders historically and contemporarily. Cross listed with SOCI 2765. Prerequisite: SOCI 1810 or permission of instructor.

GWST 2780 Women and the Law (4 Credits)
This course explores the relationship between women and the law, looking at the way the categories of sex and gender have been produced and reproduced through law. Through a look at case law and sociological research, students will examine women as bodies, workers and family members. This course also explores the development and current status of American law in the areas of women's constitutional equality, pay equity and equal opportunity, women's access to education, women in the workplace and violence against women. Cross listed with SOCI 2780. Prerequisite: SOCI 1810 or permission of the instructor.
GWST 2785 Family and the Law (4 Credits)
The government is actively involved in deciding who gets to be a family and what families should look like. The state and its laws are involved in shaping family life, making decisions for family members, and mediating familial conflict. This course looks at the appropriate role of the state in family life by examining state legislation and court decisions and social research on a variety of topics. Cross listed with SOCI 2785. Prerequisite: SOCI 1810.

GWST 2830 Representations of Women (4 Credits)
Consideration of images presented of and by women in works of English and American literature from Middle Ages to present. Cross listed with ENGL 2830.

GWST 2981 Colloquium in GWST (2 Credits)
Theme changes each year. May be repeated for credit as long as course titles are different.

GWST 2982 Colloquium in GWST (2 Credits)
Theme changes each year. May be repeated for credit as long as course titles are different.

GWST 2983 Colloquium in GWST (2 Credits)
Theme changes each year. May be repeated for credit as long as course titles are different.

GWST 2991 Independent Study (1-10 Credits)

GWST 2992 Directed Study (1-10 Credits)

GWST 2995 Independent Research (1-10 Credits)

GWST 3050 Feminism and Intersectionality (4 Credits)
This course offers an overview of feminist theories as they are in dialogue with intersectionality. It offers both a contemporary and historical perspective and is also attentive to the emergence of feminist scholarship in Communication Studies. Cross listed with COMN 3050.

GWST 3130 The Archaeology of Gender (4 Credits)
This course examines the ways archaeology can contribute to the study of gender through investigations of the deep through recent past. The class will include readings on gender theory, the uses of archaeological data, and specific case studies of engendered lives in the past. Cross listed with ANTH 3130.

GWST 3203 Women and Film (4 Credits)
This course explores the major intersections of the terms "women" and "film." It is concerned, for example, with the representation of women in film, both in the dominant Hollywood cinema and in alternative filmmaking practices (independent, experimental, documentary, and other national cinemas), with films by women and with women as cinema viewers or spectators. This course examines a variety of feminist approaches (historical, critical, theoretical) relevant to the subject matter. A lab fee is required for this course. Cross listed with MFJS 3203. Prerequisites: MFJS 200 or GWST 1112 or permission of instructor.

GWST 3652 Culture, Gender and Global Communication (4 Credits)
This course explores the ways in which culture, gender, and communication intersect and shape a variety of issues from an international and intercultural perspective. Using a global feminist perspective, it also focuses on paradigms and paradigm shifts in creating social change. Also explored are alternative paradigms of thought, action and media communications by women and indigenous peoples, which have often been ignored, discounted or buried in history. Cross listed with MFJS 3652.

GWST 3680 Gender and Communication (4 Credits)
This course focuses on the interactive relationships between gender and communication in contemporary U.S. society. This implies four priorities for the class. First, the course explores multiple ways communication in families, media, and society in general creates and perpetuates gender roles. Second, the course considers how we enact socially created gender differences in public and private settings and how this affects success, satisfaction, and self-esteem. Third, the course connects theory and research to our personal lives. Throughout the quarter, the course considers not only what is in terms of gender roles, but also what might be and how we, as change agents, may act to improve our individual and collective lives. Fourth, the course connects course content to student service learning experiences. Simultaneously, service informs academic content. All students volunteer during the quarter at a community organization and reflect on these experiences on a regular basis, using course materials as a basis for analysis and understanding. This course has a required service learning project. Cross listed with COMN 3680, HCOM 3680.

GWST 3700 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 3701 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 3702 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 3703 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.

GWST 3704 Topics in GWST (1-4 Credits)
Current issues or gender and women's studies faculty research interests.
GWST 3740 Bodies and Souls (4 Credits)
This course examines the unique place of the body in biblical religion. We ask how the Bible and its interpreters have shaped current views on sex and the gendered body in Western society. How has the Bible been (mis)used in relation to current understandings of the physical body? Is the saying that a “human” does not have a body, but is a body as true for the Hebrew Bible as the Christian New Testament? How has Judaism and Christianity (de)valued sexuality, procreation, and celibacy? How do the biblical traditions shape our modern opinions about the ideal physical body and body modifications? How can we understand “out-of-body” experiences and notions of death and afterlife in Western religion? Students are encouraged to interpret the Bible and their own beliefs from a uniquely embodied perspective. Cross listed with JUST 3740, RLGS 3740.

GWST 3871 Women in Art (4 Credits)
This course considers the roles of women in art and explores the impact of race, class and gender on art produced from the Middle Ages to the present with discussions of women artists, women patrons and images of women. Cross listed with ARTH 3871.

GWST 3873 The Goddess in Art (4 Credits)
This course will survey the image of the goddess in art from prehistoric times until the present day from a feminist perspective. Beginning with anthropological and art historical theories about the numerous female figurines of Paleolithic and Neolithic times, the course will continue to explore representations of female goddesses from ancient Mesopotamia, Egypt, Crete, Greece, and Rome. Polarized images of Eve, the Virgin Mary and several female saints during the Middle Ages will be examined. From the Renaissance through the Baroque periods, classical goddesses, especially Venus/Aphrodite, are revived and adapted to both Christian and secular contexts. Images of the sexualized female body will be explored, along with its counterpart, the witch, who was persecuted during the 16th and 17th centuries. This course will be interspersed with examples of contemporary art inspired by the “Great Goddess,” especially by feminist artists of the 1970s and 1980s. Some discussion of the goddess as she appears in contemporary popular culture will conclude the class. Cross listed with ARTH 3873.

GWST 3950 Theories in GWST (4 Credits)
This course examines the major theoretical approaches (feminist, womanist, queer, etc.) to understanding gender and other intersecting systems of oppression and privilege. It explores the historical evolution of the theoretical traditions that have informed feminism, queer theory, and gender and women's studies, as well as examining more recent developments within these fields of inquiry. Students apply these theories to a range of texts, empirical data and/or the experiential world. This course may be repeated for credit as long as course subtitles are different. Prerequisite: GWST 1112; minimum of junior standing.

GWST 3975 Capstone Seminar (4 Credits)
This course provides students the opportunity to complete a substantial final project for their degree in gender and women's studies, which may take the form of preparation for a thesis, community-based research or service project, or a substantial creative or research project. Students work closely with the director of the program or a faculty member affiliated with the program to devise these projects after spending the first part of the course exploring recent research within the field of gender and women's studies. Prerequisites: GWST major or minor, GWST 1112, GWST 3950, senior standing, or permission of instructor.

GWST 3985 GWST Internship (2-5 Credits)
GWST 3991 Independent Study (1-10 Credits)
GWST 3992 Directed Study (1-10 Credits)
GWST 3995 Independent Research (1-10 Credits)
GWST 3998 Honors Thesis (1-5 Credits)

Department of Geography and the Environment

Office: Boettcher West, Room 120
Mail Code: 2050 E. Iliff Ave. Denver, CO 80208
Phone: 303-871-2513
Email: geog-info@du.edu
Web Site: http://www.du.edu/nsm/departments/geography

Geography is an academic discipline that focuses on the spatial distribution of human and physical features around the Earth and changes over time of those phenomena. Because geography bridges the boundary between the natural world and human societies, geographers often collaborate with colleagues in related disciplines in the natural and social sciences. Geographers are taught to think in spatial and chronological terms and to analyze landscapes for indications of physical and cultural features. Geographers also create maps to illustrate spatial relationships and use geographically based data sets to answer spatial questions and analyze spatial data. The field is often subdivided into physical geography, human geography, human-environment interaction and geographic information science (GISc). Our undergraduate majors are required to take introductory coursework in each of these subdisciplines, followed by more advanced courses in each of the main fields.

The central goal of the undergraduate curriculum in geography is to produce students with a solid foundation in geographic principles and perspectives, and the professional skills to put them into practice. More specifically, the program aims to provide students with skills and techniques that will allow them to apply what they learn in the classroom, laboratory and field. Students are provided with skills in problem identification and solution; training in geotechnical tools, including geographic information systems, cartography, remote sensing, geographic statistics and spatial analysis; and experience in field and laboratory techniques. The discipline of geography is, by nature, integrative and broadly based, so interdisciplinary approaches to problem
solving are also emphasized. Our ultimate goal is to provide graduates with training and preparation for employment as professional geographers in government, private industry, education and nongovernmental agencies, and to prepare students for graduate school.

The environmental science program is an interdisciplinary program with the mission of preparing students with the knowledge and skills to identify, analyze and resolve environmental issues. Acid rain, ozone depletion, global climate change, waste management, species extinction—these are just a few of the better-known issues encompassed by environmental science, a field that addresses the totality of relationships between humans and the natural environment. Through a combination of small lecture, lab and field-oriented courses, students are given hands-on experience with environmental questions and problem solving. Extended field experiences, including alpine ecology at our field station at Mount Evans, are integrated into courses. Students also have the opportunity to participate in the field quarter, spending 10 weeks traveling throughout the western United States, Baja Mexico and other international destinations to study environmental problems and issues.

**Geography**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

Students majoring in geography may not also major in environmental science.

45 credits of geography. Requirements include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1410</td>
<td>People, Places &amp; Landscapes</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2000</td>
<td>Geographic Statistics</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2020</td>
<td>Computer Cartography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2100</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 1201</td>
<td>Environmental Systems: Weather</td>
<td>12</td>
</tr>
<tr>
<td>&amp; GEOG 1202</td>
<td>and Environmental Systems: Hydrology</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1203</td>
<td>and Environmental Systems: Landforms</td>
<td></td>
</tr>
<tr>
<td>or GEOG 1216</td>
<td>Our Dynamic Earth I</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1217</td>
<td>and Our Dynamic Earth II</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1218</td>
<td>and Our Dynamic Earth III</td>
<td></td>
</tr>
<tr>
<td>or GEOG 1264</td>
<td>Global Environmental Change I</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1265</td>
<td>and Global Environmental Change II</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1266</td>
<td>and Global Environmental Change III</td>
<td></td>
</tr>
</tbody>
</table>

Upper-division credits (2000- or 3000-level courses); at least one physical geography, one human geography and one GIScience course

<table>
<thead>
<tr>
<th>Total Credits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

1 GEOG 1264, 1265, 1266 are for Honors Program students only.

2 A list of acceptable courses is available from the Department of Geography and the Environment

The student may choose one of the following tracks of emphasis:

- natural resource management
- atmosphere and climate
- cultural and regional geography
- earth processes
- geographic analyses
- land use or urban planning

Students preparing for entrance to graduate school or intending to use geography professionally should consult regularly with their departmental advisors.

**Minor Requirements**

20 credits of geography at the 2000- or 3000-level.

**Geographic Information Science**

**Minor Requirements**

20 credits of coursework. Requirements include the following:
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2010</td>
<td>Digital Earth</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2100</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 3200</td>
<td>Remote Sensing</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

1 This course has to be taken prior to completing the other courses for the minor.

A list of acceptable elective courses is available from the geography department.

Note: As geography majors may emphasize GISc as part of their degree program, they are not eligible to complete the minor in GISc.

Prerequisites: Students are expected to have completed the Analytical Inquiry-Natural Science requirement or equivalent prior to enrolling in GEOG 2000 Geographic Statistics. Completion of an introductory course in geography such as GEOG 1410 People, Places & Landscapes; GEOG 1201 Environmental Systems: Weather; or GEOG 1216 Our Dynamic Earth I is encouraged but not required.

### Geology

A minor in geology may be arranged by consultation with the faculty of the Department of Geography and the Environment.

**Minor Requirements**

Minimum of 20 credits of geology.

### Environmental Science

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

Students majoring in environmental science may not also major in geography.

75 credits. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1201</td>
<td>Environmental Systems: Weather</td>
<td>12</td>
</tr>
<tr>
<td>&amp; GEOG 1202</td>
<td>and Environmental Systems: Hydrology</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1203</td>
<td>and Environmental Systems: Landforms</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2010</td>
<td>General Ecology</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2011</td>
<td>and General Ecology Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2050</td>
<td>Conservation Biology</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2051</td>
<td>and Conservation Biology Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>and Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2240</td>
<td>Introduction to Environmental Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 2090</td>
<td>Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2000</td>
<td>Geographic Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2300</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**Environmental Science Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Geography/Geology/Envi</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Additional Electives</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>

* A list of acceptable courses is available from the Department of Geography and the Environment.
Additional Requirements

20 credits in a minor field of study

No more than five credits taken as independent study, internship or independent research may be counted toward the minimum hours required in the major.

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

Students majoring in environmental science may not also major in geography.

94 credits. Requirements include:

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1201</td>
<td>Environmental Systems: Weather</td>
<td>12</td>
</tr>
<tr>
<td>&amp; GEOG 1202</td>
<td>Environmental Systems: Hydrology</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOG 1203</td>
<td>Environmental Systems: Landforms</td>
<td></td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>Evolution, Heredity and Biodiversity Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2010</td>
<td>General Ecology</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2011</td>
<td>General Ecology Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 2050</td>
<td>Conservation Biology</td>
<td>5</td>
</tr>
<tr>
<td>&amp; BIOL 2051</td>
<td>Conservation Biology Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>General Chemistry Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2451</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 2461</td>
<td>Organic Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 2240</td>
<td>Introduction to Environmental Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2700</td>
<td>Contemporary Environmental Issues</td>
<td>4</td>
</tr>
<tr>
<td>ENVI 3000</td>
<td>Environmental Law</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1111</td>
<td>General Physics I</td>
<td>15</td>
</tr>
<tr>
<td>&amp; PHYS 1112</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS 1113</td>
<td>General Physics III</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2090</td>
<td>Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2000</td>
<td>Geographic Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 2300</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
</tbody>
</table>

Environmental Science Electives

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>12</td>
</tr>
<tr>
<td>Geography/Geology/Envi</td>
<td>12</td>
</tr>
<tr>
<td>Additional Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>94</strong></td>
</tr>
</tbody>
</table>

* A list of acceptable courses is available from the Department of Geography and the Environment.

Additional Requirements

Calculus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits

8

No more than five credits taken as independent study, internship or independent research may be counted toward the minimum hours required in the major.
Minor Requirements

26 credits. Requirements include:

- GEOG 1201 Environmental Systems: Weather
- & GEOG 1202 and Environmental Systems: Hydrology
- & GEOG 1203 and Environmental Systems: Landforms
- BIOL 1011 Evolution, Heredity and Biodiversity
- & BIOL 1021 and Evolution, Heredity and Biodiversity Lab
- BIOL 2010 General Ecology
- & BIOL 2011 and General Ecology Lab
- GEOG 2700 Contemporary Environmental Issues

Total Credits: 26

Students having completed the required courses as part of other degree program requirements complete the 26-credit requirement by taking courses from the approved list of courses available from the Department of Geography and the Environment.

Environmental Science Courses

ENVI 2660 Environmental History of Sonora & Baja Mexico (5 Credits)
Geography and ecology of desert southwest emphasizing Mexican states of Sonora, Baja California del Sur and Baja California. Traveling by van and lodging in tents, trip covers 3,500 miles, offers hands-on experience with principles and problems of physical geography and ecology in desert environments. Offered only during Interterm.

ENVI 2801 Water Quality of Western Rivers and Streams (2,4 Credits)
This course covers the physical, chemical, and biological aspects of water quality of Colorado rivers and streams. Impacts from human activities, including mining and agriculture are evaluated. Significant time is spent assessing the water quality of surface and ground waters by completing a course-long project that evaluates the water quality of three surface rivers/streams near the University of Denver: Sand Creek, Clear Creek, and the headwaters of the Arkansas River. The course is an integrate lab/lecture course with significant time spent in the field collecting data. Prerequisite: GEOG 1203 or CHEM 1010.

ENVI 2950 Topics in Env. Science (1-4 Credits)
An in-depth coverage of a specific environmental issue, topic, or problem. Topics vary with instructor.

ENVI 2992 Directed Study (1-10 Credits)

ENVI 3000 Environmental Law (4 Credits)
Purpose and applications of federal laws pertaining to environmental protection, including NEPA, RCRA, CERCLA, and Clean Water and Clean Air Acts; addresses role of states in implementation of federal environmental laws.

ENVI 3550 Environmental Issues-Colorado (4 Credits)
This course focuses on the identification, analysis and mitigation of landscape-scale environmental issues or concerns, using watersheds as units of study. Emphasis is on field data collection and analysis to answer specific questions or address particular problems.

ENVI 3991 Independent Study (1-5 Credits)
Study of a topic not covered in existing course offerings. May be used for work completed in off-campus internships that focus primarily on the mastery of existing knowledge.

ENVI 3992 Directed Study (1-10 Credits)

ENVI 3995 Undergraduate Research (1-5 Credits)
Original research in environmental science topic under sponsorship of a faculty member; applicable to studies that focus primarily on discovery of new knowledge through application of scientific method.

ENVI 3999 Environmental Science Internship (1-5 Credits)
Supervised internship in a state, local, or federal office or in the private sector. Prerequisites: 15 quarter hours in the environmental science major and approval of supervising faculty. Maximum of 5 quarter hours total.

Geography Courses

GEOG 1201 Environmental Systems: Weather (4 Credits)
First class in a three-quarter sequence that introduces the fundamental processes that govern the physical environment; introduction to the fundamentals of the environmental system and the various processes that control weather and climate. The student will have a fundamental understanding of the basic components of the environmental system, familiarity with the role of energy in the atmosphere and its control over cycles of air temperature, a sound foundation in the mechanisms governing cloud formation and precipitation, a basic understanding of the atmospheric circulation and the storm systems which develop within it, and an introduction to the regional variation of climate. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.
GEOG 1202 Environmental Systems: Hydrology (4 Credits)
Second class in a three-quarter sequence that introduces the fundamental processes that govern the physical environment; the role of water in the environment. This course focuses on the matter and energy flows through the hydrologic cycles, together with the resulting spatial distribution and work of water. Various environmental issues concerning water including drought, water pollution, and human impacts on water supplies are included. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: GEOG 1201.

GEOG 1203 Environmental Systems: Landforms (4 Credits)
Third class in a three-quarter sequence that introduces the fundamental processes that govern the physical environment; geological phenomena in various places in the world. Topics include maps and air photos; rocks and minerals; plate tectonics and volcanoes; landforms produced by wind, water, earth forces and ice; and biogeography. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: GEOG 1201 and GEOG 1203.

GEOG 1216 Our Dynamic Earth I (4 Credits)
This is the first quarter of a three-quarter sequence devoted to studying natural hazards and their impacts on society. Natural processes become hazards when they have the potential to have an adverse effect on humans and their property, or the natural environment. This first quarter of the sequence introduces students to the physical processes associated with atmospheric natural hazards (tornadoes, hurricanes, severe storms) and their societal impacts. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

GEOG 1217 Our Dynamic Earth II (4 Credits)
This is the second quarter of a three-quarter sequence devoted to studying natural hazards and their impacts on society. In this course, students investigate the physical processes that result in hydrologic natural hazards (floods, drought, tsunamis) and their societal impacts. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

GEOG 1218 Our Dynamic Earth III (4 Credits)
This is the third quarter of a three-quarter sequence devoted to studying natural hazards and their impacts on society. In this course, students investigate the physical processes that result in geologic natural hazards (earthquakes, landslides, volcanoes) and their societal impacts. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: GEOG 1217.

GEOG 1264 Global Environmental Change I (4 Credits)
First class in a three-quarter sequence for honors students. This course examines the processes and drivers of global environmental change and its consequences for humans and the environment. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

GEOG 1265 Global Environmental Change II (4 Credits)
Second class in a three-quarter sequence for honors students. This course examines the processes and drivers of global environmental change and its consequences for humans and the environment. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: GEOG 1264.

GEOG 1266 Global Environmental Change III (4 Credits)
Third class in a three-quarter sequence for honors students. This course examines the processes and drivers of global environmental change and its consequences for humans and the environment. A lab fee is associated with this course. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: GEOG 1265.

GEOG 1410 People, Places & Landscapes (4 Credits)
In this course, students will study the location of people and activities across the surface of the Earth. Describing the locations and patterns of human activity only lays the foundation for exploring how and why such patterns have developed historically, and how they relate to the natural environment and other aspects of human behavior. This course counts toward the Scientific Inquiry: Society and Culture requirement.

GEOG 1992 Directed Study (1-10 Credits)

GEOG 2000 Geographic Statistics (0-4 Credits)
An introduction to statistics primarily for geography and environmental science students focusing on the scientific method, the nature of data, descriptive statistics, and analytical or inferential statistics.

GEOG 2010 Digital Earth (4 Credits)
Paper maps will always with us but clearly society has turned to a “digital earth” to enhance our spatial awareness. Digital data are available in many formats and via countless applications for locating, sharing, and analyzing geographic data about the world around us. In this class we will explore the fundamentals of geospatial technology, including Geographic Information Systems (GIS), Global positioning systems (GPS), remote sensing, and spatial analysis through a series of computer exercises. Students will learn how to use geospatial technology to address social and environmental issues. This course is a survey of geospatial technology but can be used as an entry-level course into a geospatial program.

GEOG 2020 Computer Cartography (4 Credits)
Basic map design and execution using existing maps. Topics include map projections, symbolizing quantitative data, use of space, layout, compilation, verbal content, and the use of computer technology in design and production of maps.

GEOG 2030 Field Methods (4 Credits)
Part I, outdoor instruction in use of Brunton compass, level, plane table, and alidade; Part 2, data-gathering techniques and preparation for field work in urban problems.
GEOG 2100 Introduction to Geographic Information Systems (GIS) (4 Credits)
Overview of GIS, including background, development, trends, and prospects in this technological field; software package and hands-on exercises used to examine basic geographic concepts and spatial data characteristics associated with automated mapping, projections, scales, geocoding, coordinate referencing, and data structures for computerized land-based data bases. Cross listed with GEOG 3100.

GEOG 2310 The Political Ecology of Natural Resources in Guatemala (4 Credits)
This class, through the lens of political ecology and action-oriented research, introduces students to the extremes of Guatemala and how one of the most unequal societies in the West has evolved over the past 500 years. With a firm understanding of Guatemala’s social reality we then conduct initial community-based research with several communities in the highlands and lowland return refugee frontier communities with the goal of identifying the best options for sourcing and then providing potable water and/or other vital resources. The class also introduces students to field methods in cultural geography and then how to apply them in field in international settings.

GEOG 2320 Andean Landscapes (4 Credits)
This class introduces students to intensive field activities pertinent to the study of Andean individuals and societies. Students study the characteristics of people, activities, as well as landscapes across the locations of Lima, Cusco and Puno in Peru. This course focuses on geography, history, archaeology, anthropology, biology, ecology and sustainability issues surrounding the above mentioned destinations. This course involves moderate physical activity (Inca Trail hike).

GEOG 2401 The Human Population (4 Credits)
This course covers the fundamental concepts of demography with an emphasis on its relevance to inquiry in disciplines including economics, business, geography, environmental science, political science and sociology. This course counts toward the Scientific Inquiry: Society and Culture requirement.

GEOG 2410 Economic Geography (4 Credits)
Economic elements as spatially arranged, distribution of economic activities on the Earth’s surface; market, resource and transportation factors in location theory.

GEOG 2420 Geography of Tourism (4 Credits)
Major cultural and environmental motivations for tourism; major tourism flow patterns; and predominant domestic and international touristic regions.

GEOG 2430 World Cities (4 Credits)
The study of world cities from a geographical perspective emphasizes the following general topics: 1) worldwide urbanization and globalization processes; 2) the study of cities as nodes within global, regional, and national urban systems; 3) the internal spatial structure of land uses within cities; 4) the spatial dimensions of economic, social, political, and cultural processes in cities; and 5) environmental elements, involving human interrelationships with the natural environment in an urban setting. Urban patterns and processes are examined in each of the world’s major regions, including in-depth analysis of focus case study cities. This course counts toward the Scientific Inquiry: Society and Culture requirement.

GEOG 2450 Issues in Sustainabilities (4 Credits)
The capstone seminar focuses on a particular problem related to sustainability. Seminar topics vary by instructor, but include a combination of readings, discussion, guest speakers, a group project (either service learning or research), and individual research presentations. Prerequisite: GEOG 2500 and completion of all other requirements for the sustainability minor.

GEOG 2500 Sustainability & Human Society (4 Credits)
Sustainability has become a catch phrase in discussions concerning the long-term viability of a number of phenomena, from the environment to the economy. Sustainability is commonly defined as meeting the needs of the current generation without compromising the ability of future generations to meet their needs. Students are introduced to issues inherent in discussions of sustainability. The major areas of focus include definitions of ecological and environmental sustainability, economic and political sustainability, and social justice, and various metrics used to assess sustainable behavior and practices. Students study the theory, principles and practices of sustainability, and participate in discussion and writing exercises based on lecture and readings.

GEOG 2550 Issues in Sustainabilities (4 Credits)
The capstone seminar focuses on a particular problem related to sustainability. Seminar topics vary by instructor, but include a combination of readings, discussion, guest speakers, a group project (either service learning or research), and individual research presentations. Prerequisite: GEOG 2500 and completion of all other requirements for the sustainability minor.

GEOG 2608 Human Dimensions of Global Change (4 Credits)
This course documents and explores the transformations of the global environment that have occurred in the last 300 years and relates them to contemporaneous changes in population and society. Students examine the complexity of human-induced environmental changes by looking at the various social, economic, political, institutional and behavioral components of these forces at work. By using various case studies, students examine the processes and spatial distributions of anthropological changes to the world’s lands, freshwater, biota, oceans and atmosphere.

GEOG 2700 Contemporary Environmental Issues (4 Credits)
Principles, practices, issues, and status of care of environment; lectures, readings, and discussions focus on causes, effects, and mitigation of a selection of topical regional, national, and international environmental problems including Denver’s air pollution, acid deposition, hazardous waste management, global warming, and tropical deforestation.

GEOG 2810 Geography of Latin America (4 Credits)
This course studies the countries and islands of Middle America; the interrelationships of peoples, resources and physical features. Cross listed with GEOG 4810.
GEOG 2830 Geography of Europe (4 Credits)
A field course that examines relationships between humans and the environment in Europe. We study both urban and rural environments to understand the following questions: What are the elements (climate, vegetation, landforms) that characterize European natural landscapes? How have humans modified these natural landscapes? How have environmental conditions influenced human activities (e.g. agriculture, architecture, economic development)? How are these human activities manifested at the landscape scale, and how are they organized in geographic space? How have humans attempted to preserve natural landscapes? Prerequisites: GEOG 1201, GEOG 1202, GEOG 1203 and field quarter application process through the geography department.

GEOG 2860 Geography of the Middle East (4 Credits)
In-depth study of the physical and human geography of the Middle East. Upon completion of this course, students will be able to think and speak effectively about the Middle East, particularly about relationships between villagers, nomads and city folk; about the history of the region; about management of environmental problems such as desertification and water shortages; about the civilization of Islam, about culture and the role of all religions; about the reasons for war, the need for peace, and the role of terrorism; about oil and more importantly, the oil curse, and finally about the role of US foreign policy.

GEOG 2870 Geography of India (4 Credits)
This course will provide students with a comprehensive idea about India, which is considered as a major emerging power of this century. India is extremely diverse in terms of physical features and cultural practices. It has a very dynamic economic and political system. The long history of the land and its rich cultural heritage has made its lifestyle very different from the people outside the subcontinent. This course deals with all the above issues in brief and helps the students to gain an overall knowledge of the subcontinent. This is a good foundation course for those who participate in the study abroad program in India and also others who are interested in this region of the world.

GEOG 2992 Directed Study (1-10 Credits)

GEOG 3000 Advanced Geographic Statistics (4 Credits)
The second in a sequence of two courses that address general statistical applications particular to geography, environmental science and other disciplines dealing with a spatial dimension in the data they work with. The focus of this second course is on the more advanced multivariate statistical techniques. The course has a strong applied orientation as particular attention is given to which technique is the most appropriate to use for a given type of problem and how to interpret and apply the resulting statistics. Extensive use is made of computer statistics packages. Homework exercises involving such statistical techniques as multiple correlation and regression analysis, principle components analysis, discriminate analysis and canonical correlation. Prerequisite: GEOG 2000.

GEOG 3010 Geographic Information Analysis (4 Credits)
Reviews many basic statistical methods and applies them to various spatial datasets. In addition, several spatial statistical methods are applied to spatial datasets. This course is an in-depth study of the interface between GIS, spatial data, and statistical analysis. Preferred prerequisite: GEOG 2000. Prerequisite: GEOG 2100.

GEOG 3030 Advanced Field Methods (4 Credits)
Various field methods used by researchers in physical geography; techniques include field mapping, laboratory analyses, geologic field methods. Prerequisite: GEOG 1201 or equivalent.

GEOG 3040 GPS for Resource Mapping (4 Credits)
This course is an introduction to GPS (Global Positioning Systems) concepts, techniques, and applications as they relate to GIS data collection. Lectures focus on satellite surveying, GPS technology, error sources, program planning, data collection design, and Quality Control and Quality Assurance issues for data collection programs. Hands-on lab exercises include navigation, mission planning for a GPS survey, designing a field data collection plan and associated data dictionary, field data collection, differential correction, and data integration into a GIS and map production.

GEOG 3100 Geospatial Data (4 Credits)
This graduate-level course is designed to provide graduate students from a broad range of disciplines with the skills to carry out applied research tasks and projects requiring the integration of geographic information system technologies and geospatial data. Students are introduced to a collection of techniques and data sources with a focus on acquiring and integrating data. Legal, ethical, and institutional problems related to data acquisition for geospatial information systems are also discussed. Cross listed with GEOG 2100.

GEOG 3110 GIS Modeling (4 Credits)
This course focuses on the concepts and procedures used in discovering and applying relationships within and among maps. It extends the mapping and geo-query capabilities of GIS to map analysis and construction of spatial models. The course establishes a comprehensive framework that addresses a wide range of applications from natural resources to retail marketing. Topics include the nature of spatial data introduction to spatial statistics and surface modeling in the first five weeks followed by spatial analysis operations and modeling techniques in the second five weeks. The lectures, discussions and independent exercises provide a foundation for creative application of GIS technology in spatial reasoning and decision making.

GEOG 3130 Advanced Geographic Information Systems (4 Credits)
This advanced course explores the more technical aspects of GIS functions and data structures. Students have hands-on access to both raster (grid-cell) and vector-based software packages in the form of lab exercises that culminate in a small student-designed GIS project. Prerequisite: GEOG 2100.
GEOG 3140 GIS Database Design (4 Credits)
Designing databases to provide a foundation for GIS functions and applications, including investigating techniques used for designing databases in non-spatial environments and learning the applicability to GIS problems. Building on concepts and techniques introduced in the first half to extend traditional techniques and methodologies to model the requirements of spatial problems. Students learn to translate the conceptual spatial model into a physical implementation specific to GIS products. Prerequisite: GEOG 2100 or GEOG 3100.

GEOG 3150 GIS Project Management (4 Credits)
This course provides graduate students seeking a career in GIS, or anyone managing a GIS project, with the knowledge, skill and abilities to take a GIS project or program past the design and implementation phase and into day-to-day operation. Students evaluate and analyze the role of GIS in an organization's overall information system strategy and communicate the importance of geography in an information system. Data sharing in the organization is examined to determine the benefits and costs of distributing data creation and maintenance activities throughout an organization. Finally, the role of GIS professionals and the skill sets required to manage GIS effectively are examined. Students review case studies of successful and not-so-successful GIS projects in North America. GIS management issues are addressed by a series of case studies focusing on various management aspects. Students are also expected to visit operational GIS programs in the metropolitan area and interview GIS managers. Students prepare case study evaluations for review in the classroom. Required for all MSGIS students because of the critical importance of GIS project management.

GEOG 3200 Remote Sensing (4 Credits)
This course acquaints students with the basic techniques of the collection, processing and interpretation of information about the character of the earth's surface from remote locations. Students become familiar with the use of the visible, infrared, thermal and microwave portions of the electromagnetic spectrum as a means of determining land cover and/or land use. Both manual and computer-assisted techniques are discussed and include hands-on applications.

GEOG 3230 Advanced Remote Sensing (4 Credits)
This course will build on the basic remote sensing concepts presented in GEOG 3200. Students will explore more in-depth concepts relevant to satellite and airborne remote sensing, including radiative transfer and information extraction. In addition, students will be introduced to two cutting-edge sources of data about the Earth’s surface: hyperspectral and lidar (Light Detection and Ranging) sensors. Students will study specific applications of advanced digital image processing techniques for environmental monitoring, natural resource management, and land-use planning. Finally, students will integrate remote sensing and other spatial datasets in the context of Geographic Information System (GIS) analysis. Prerequisite: GEOG 3200.

GEOG 3300 Cultural Geography (4 Credits)
Themes and methods of cultural geography including cultural area, landscape, history and ecology.

GEOG 3310 Culture/Nature/Economics-Human Ecology (4 Credits)
Cultural adaptation, livelihood strategies and environmental modification among subsistence and peasant societies: responses of such groups to technological change and economic integration.

GEOG 3320 Advanced Remote Sensing (4 Credits)
This course explores contemporary movement of people across international borders and the social, cultural, political, economic, and environmental repercussions of such movements. The class looks at the global flow of people across national boundaries and the ways in which these dispersed peoples build and maintain social networks across national borders. While doing so, we address the role of globalization in international migration processes. What motivates people to move long distances, often across several international borders and at considerable financial and psychological cost? How do migrants change—and how in turn do they bring change, social as well as economic, to new destinations as well as places left behind? This course examines politics and patterns of migration, transnational migration, and immigration to the United States.

GEOG 3330 Geographies of Migration (4 Credits)
This course focuses upon qualitative methods in the production of geographic knowledge. Qualitative methods are widely employed by geographers to understand patterns and underlying processes of human and human-environment issues in society. The course is designed to expose participants to the theories, purpose, scope, and procedures of qualitative research. Specific topics include: epistemological theories (ways of knowing); ethics and power in research; research design; data collection techniques in interviewing, participant observation and landscape interpretation, discourse and archive analysis, and case studies; data analysis; and writing and disseminating qualitative findings.

GEOG 3400 Urban Landscapes (4 Credits)
Urbanization as a process; national urban systems; internal spatial structure of cities; role of transportation in urban development; location of residential, commercial and industrial activities; agglomeration economies; residential congregation and segregation; environmental justice; urban growth and growth coalitions; decentralization and urban sprawl; edge cities; impacts on the urban environment; world cities; globalization.

GEOG 3410 Urban Applications in GIS (4 Credits)
This course uses the tools of geographic information systems (GIS) to explore concepts of traditional urban geography, including defining cities/metropolis, internal urban structures, urban systems, industrial location, social and residential patterns, urban form, environmental problems, and urban planning. The course allows students to practice fundamental skills in GIS (e.g., working with attribute tables, spatial analysis, spatial queries) and cartography (map design, color theory, display of information). Depending on the quarter, students pursue individual projects of interest or client-based projects. Prerequisite: GEOG 2100 or GEOG 3100 or equivalent.
GEOG 3420 Urban and Regional Planning (4 Credits)
Historical evolution of planning theory and practices; comprehensive planning process; legal, political, economic, social, environmental aspects of urban planning; urban design; urban renewal and community development; transportation planning; economic development planning; growth management; environmental and energy planning; planning for metropolitan regions; national planning.

GEOG 3425 Urban Sustainability (4 Credits)
The 21st century is being called the ‘century of the city.’ Now more than ever, humans across the globe call the city their home. Many of the world’s most pressing crises are manifest in cities, including: greenhouse gas emissions, land degradation, high mass production and consumption, widespread poverty and hunger, and expanding socio-economic disparities. As ‘sustainability’ becomes part of mainstream discourse, this course explores what sustainability means for urban contexts around the globe. Arguably, the city has the potential to be the most efficient, equitable, and environmental form of modern human settlement. Covering all dimensions of sustainability from a social science perspective, this course focuses on theoretical groundings, practices of urban sustainability, and new research agendas. Major topics include cities and nature; planning and land use; urban form; community and neighborhoods; transportation systems and accessibility; livelihood and urban economies; and social justice and the city.

GEOG 3440 Urban Transportation Planning (4 Credits)
A specialized course in the urban planning sequence focusing on issues, practices and policies of urban transportation planning. Recommended for anyone interested in timely transportation topics, such as the feasibility and impacts of light rail transit, the planning and implementation of highway projects, and the role of freight and passenger transportation companies in transportation planning.

GEOG 3445 Sustainability and Transportation (4 Credits)
Sustainable transportation aims at promoting better and healthier ways of meeting individual and community needs while reducing the social and environmental impacts of current mobility practices. Given the importance of transport for economic growth, the uncertainties surrounding the availability and price of future sources of energy for transport use, as well as the social and environmental externalities of currently-utilized transport modes, it is imperative that more sustainable ways of providing transportation be developed and utilized.

GEOG 3450 Transportation and Mobilities (4 Credits)
The geographical study of transport has grown considerably and become more diverse, encompassing new areas of inquiry generated from economic, urban, environmental, political, social, and cultural geography, as well as from transport geography itself. The most notable expansion has been in the area of ‘mobilities’ research, which is focused on the social aspects of mobility, including both the large-scale movements of people, objects, capital, and information across the world, as well as the more local processes of daily transportation, movement through public space and the travel of material things within everyday life.

GEOG 3470 GIS & Environmental Health Geography (4 Credits)
This course is designed to acquaint students with the spatial distributions of populations and their relationships to environmental pollution sources and health outcomes. It utilizes real-life scenarios using population data from the U.S. census, EPA pollution data and various types of vital statistics data. The goal is to implement novel geographic techniques such as spatial analytical techniques and atmospheric modeling of pollutants to assess possible health risks and outcomes. This class requires basic GIS knowledge.

GEOG 3500 Reconstructing Quaternary Environments (4 Credits)
Nature, magnitude, sequence and causes of Pleistocene and Holocene climatic changes; effects of climatic change on plant/animal distributions and human populations; paleoclimatic research methods. Laboratory and field trips. Prerequisites: GEOG core, ENVI 3000.

GEOG 3510 Biogeography (4 Credits)
Biogeography focuses on present and past distributions of plants and animals. In this course we consider a number of themes central to biogeography, including plate tectonics and biogeography, the effects of climate change on plant and animal distributions, biogeographic realms, island biogeography, biodiversity, human impacts on plants and animals, and the origins of agriculture.

GEOG 3520 Geography of Soils (4 Credits)
Spatial variation in soil characteristics; soil processes, soil morphology, their application in soil studies. Prerequisite: GEOG 1203 or equivalent or instructor's permission. Recommended prerequisite: general chemistry.

GEOG 3550 Topics in Physical Geography (1-5 Credits)
Investigations into various aspects of physical environment.

GEOG 3560 Fluvial Geomorphology (4 Credits)
Examines how water and sediment interact at Earth's surface to create a variety of landforms ranging from small rills to continental-scale river systems. Introduces fundamental fluvial processes or channel hydraulics and sediment transport. Examines common fluvial landforms including alluvial streams, bedrock streams, floodplains and alluvial fans. Combines traditional lectures and in-class discussions with numerous field excursions to rivers in the Rocky Mountains and Great Plains. Prerequisite: GEOG 1203, GEOG 1218, or GEOG 1266.

GEOG 3600 Meteorology (4 Credits)
The basic theory and skills of weather forecasting. Topics include thorough coverage of atmosphere dynamics and thermodynamics, the evolution of various weather types, the mechanics of storm systems (cyclones, severe storms, hurricanes), creation and interpretation of weather maps, and forecasting techniques.
GEOG 3610 Climatology (4 Credits)
Climatology is the study of the processes that result in spatial and temporal variation of weather. This course introduces the student to the processes responsible for the transfer of matter and energy between the Earth's surface and the atmosphere and the average weather conditions that result. In addition, topics of global concern, such as greenhouse effect, El Nino, urban heat islands and acid rain, are discussed. Laboratory exercises provide an opportunity to investigate climate variation and climatic change through the use of a variety of computer simulations.

GEOG 3620 Applied Climatology (4 Credits)
Climatic impact on environmental systems and human behavior: techniques to investigate climatic characteristics of environmental extremes (floods, blizzards), urban climatology and socioeconomic impacts of climate. Prerequisite: GEOG 1201. Recommended Prerequisite: GEOG 3600 or GEOG 3610.

GEOG 3630 Dendroclimatology (2-4 Credits)
Systematic variations in tree ring width and/or density can be used to reconstruct changes in precipitation or temperature well before humans were around to record the variability. This class utilizes hands on methods to introduce the fundamental principles of dendroclimatology. Through readings and lectures, students will learn how tree ring growth can be correlated to climate change. Students will then undertake several research projects to reconstruct past climate variability in the Denver metro area using tree rings. Prerequisite: permission of instructor.

GEOG 3640 Climate Change and Society (4 Credits)
The science of anthropogenic climate change will be presented with an emphasis on critical evaluation of the evidence of climate change and future scenarios and migration strategies. Students will be introduced to the latest climate change research, including the Intergovernmental Panel on Climate Change report, and the most recent literature from the field. The societal and cultural implications of climate change will also be discussed. Prerequisites: GEOG 1201, GEOG 1216, or GEOG 1264.

GEOG 3700 Environment & Development (4 Credits)
Course examines interrelated nature of environmental and development issues in the Third World; addresses the place of environment in development theory and practice and the political ecology of Third World environmental problems and sustainable development approaches.

GEOG 3701 Topics in Geographic Information Science (1-4 Credits)
Topics vary by instructor.

GEOG 3710 Environmental Change in the Eastern Mediterranean (2 Credits)
We tend to associate environmental problems with modern societies and high technology. However, humans have had impacts on the environment, and have had to cope with challenges brought by the environment, throughout their history. Western cultures are intimately linked to the eastern Mediterranean, where some of the earliest centralized governments arose, agriculture developed, and humans first began living in permanent settlements, so the region has a long history of human-environment interaction. This class focuses on historical, archaeological, and paleoenvironmental records from the region to investigate the impacts of human activities, including deforestation, intensive agriculture, and urban development, on the environment, and the ways in which societies in the region responded to natural environmental perturbations, including drought, earthquakes, and volcanic eruptions.

GEOG 3720 Mountain Environments and Sustainability (4 Credits)
Mountain Environments and Sustainability explores the unique physical and cultural aspects of high relief and/or high altitude environments. Covering one quarter of the Earth's land surface, mountains directly or indirectly impact the lives of millions of people. We examine the significance of mountains to climate, water resources, and human activities, and discuss the sustainability of these environments and communities in light of rapid changes in many mountain regions resulting from anthropogenic factors and global change. GEOG 1201, 1202, and 1203 or instructor approval.

GEOG 3730 International Environmental Policy (4 Credits)
This course acquaints students with the global perspective on current problems of environmental protection and resource use. Population growth, food production, industrialization, technology and cultural change are considered, with heavy emphasis on the social dynamics of environmental problems. A variety of political views are studied, and an attempt is made to develop a perspective useful to students in personal and political decisions.

GEOG 3740 Environmental Justice in the City (4 Credits)
This course is designed to acquaint students with environmental justice in the urban environment. This class focuses on the City of Denver as a laboratory to explore the disproportionate impacts of social justice issues, particularly urban pollution, healthy food sources, gentrification, light rail, and employment opportunities, on neighborhoods and communities. A variety of views are studied, and an attempt is made to develop a perspective useful to students to explain urban social justice conditions.

GEOG 3750 Topics in Human-Environment Interactions (1-4 Credits)
This course investigates various aspects of the relationships between human societies and the natural environment.

GEOG 3755 Geography of Health (4 Credits)
The geography of health is a thriving area of study that considers the impact of natural, built, and social environments on human health. This course introduces students to three geographical contributions to health studies. First, it emphasizes the importance of ecological approaches to health, which consider interactions between humans and their environments, including topics such as how climate change might influence disease distributions, and how the built environment can influence patterns of physical activity. A second focus is social theory, exploring how aspects such as race, socioeconomic status, and identity play a critical role in influencing human health. A third section of the course considers how spatial methods (cartography, GIS, and spacial statistics) can help answer health-related questions.
GEOG 3800 Geography of Colorado (4 Credits)
This course focuses on the physical and human geography of Colorado, a state that includes the western Great Plains, the southern Rocky Mountains, and the eastern Colorado Plateau. Colorado’s varied natural landscapes provide equally varied settings for human settlement and resource use. Recommended Prerequisites: GEOG 1201, GEOG 1202, and GEOG 1203.

GEOG 3830 Natural Resource Analysis & Planning (4 Credits)
Natural resources provide the basis for all human agricultural and industrial activities. This course discusses our resource distribution, conservation, management and sustainable use.

GEOG 3840 Water Resource Analysis (4 Credits)
The focus of this course is on complex policy, economic and local, national and international, and political issues surrounding resource use in the western U.S. Issues include exploitation of nonrenewable and renewable energy and mineral resources; and flexible responses to changing public policy.

GEOG 3860 GIS Applications and Natural Resources (4 Credits)
In this course we will use a case study approach to examine domestic and international natural resources such as oil, coal, timber, minerals, and recycled materials. We will use a case study approach to look at resource distribution, and the environmental impacts of extraction, production, and disposal, as well as the legal and economic context. We will use GIS data and analysis to enhance our understanding of these case studies, and students will do a project and paper using GIS data and image analysis at a local, regional or global scale. Prerequisite: Introduction to GIS or Introduction to GIS Modeling.

GEOG 3870 Water Resources & Sustainability (4 Credits)
In this course, we look at water as both a local and global resource and examine what sustainability means for human and ecological realms. After an overview of the physical processes that drive the hydrologic cycle, surface and groundwater hydrology, we examine how we humans have harnessed water for our use and how we both alter and treat its quality. We examine the legal aspects of water allocation in the U.S. and the groups and agencies that are most involved in managing and overseeing water issues. Finally, we examine the most pressing water issues related to wildlife, development, scarcity and conflict. We look forward to imagining the power of both the individual and the collective in meeting our future, global water needs.

GEOG 3880 Cleantech and Sustainability (4 Credits)
Cleantech has only recently become part of our vernacular and it refers to the technology that enables us to produce energy in a manner that has little or no environmental impact (solar, geothermal, wind, responsible biofuels). Clean technology will not only offer us a chance to rehabilitate the climate, but should make us more aware of how fundamental our approach to everyday life needs a more sustainable consciousness. As part of the debate, we will examine some of the problems facing civilization, why we are not sustainable, who the major players are, and how a more sustainable existence is not just our moral obligation, but it is also good economics and sound foreign policy that will accelerate poverty alleviation.

GEOG 3890 Ecological Economics (4 Credits)
Ecological Economics is an emerging transdisciplinary endeavor that reintegrates the natural and social sciences toward the goal of developing a united understanding of natural and human-dominated ecosystems and designing a sustainable and desirable future for humans on a materially finite planet. In this course we start with a basic overview and summary of the neo-classical economic perspective with a particular focus on the recognized market failures of public goods, common property, and externalities. We begin with a reconceptualization of economic theory by imposing scientific constraints (e.g. conservation of mass and energy, the laws of thermodynamics, evolutionary theory, etc.). Using the ideas developed in this reconceptualization of economic theory we explore the implications for international trade and myriad public policies associated with the ethical, environmental, and economic aspects of sustainability.

GEOG 3910 Process Geomorphology (4 Credits)
The land surface of Earth is continuously altered by geomorphic processes. This class focuses upon the nature of these processes, the work that they perform and the resulting landforms. In addition, students become familiar with various methods of geomorphic analysis through the laboratory component of the class. Cross listed with GEOL 3010. Prerequisite: GEOG 1202 or GEOG 1217 or instructor’s permission.

GEOG 3920 Remote Sensing Seminar (4 Credits)
Special topics in advanced remote sensing.

GEOG 3930 Cultural Geography Seminar (4 Credits)
Topics, methods and current research in cultural geography.

GEOG 3940 Urban Geography Seminar (4 Credits)
International comparison of economic and social, positive and negative aspects of urban systems. Prerequisite: GEOG 3400 or GEOG 3420.

GEOG 3950 Physical Geography Seminar (2-4 Credits)
GEOG 3955 Pollen Analysis Seminar (3 Credits)
Pollen grains preserved in sediment provide long-term records of vegetation conditions. Changing proportions of pollen types may reflect climatic fluctuation or human impacts. We review important recent research in pollen analysis (palynology), pollen sampling, laboratory techniques and pollen identification. Students are responsible for counting a number of samples and contributing data for a pollen diagram.

GEOG 3990 Undergraduate Research Seminar (1 Credit)
This course is designed to prepare students who will participate in faculty-supervised summer research projects. Students are introduced to research design, use of the scientific method, research expectations and reporting of results. Preparation of formal research proposal with adviser.
GEOG 3991 Independent Study (1-5 Credits)
GEOG 3992 Directed Study (1-10 Credits)
GEOG 3995 Independent Research (1-5 Credits)
GEOG 3999 Geographic Internship (0-5 Credits)

Supervised internship in a government office at local, state or federal level or within private sector. Prerequisite: permission of instructor.

Geology Courses

GEOL 1010 Physical Geology (4 Credits)
Physical geology examines the internal structure of the Earth, the nature and properties of Earth materials, their distribution through the Earth, and the processes by which rocks are formed, altered, and transported. This course serves as an introduction to the geological sciences and is a prerequisite to advanced study.

GEOL 1992 Directed Study (1-10 Credits)

GEOL 2020 Historical Geology (4 Credits)
Historical geology is the study of the evolution of Earth through geologic time. Geologic features such as rock types and fossils are used to interpret and date past events. This course specifically introduces the basic geologic principles underlying historical geology, the geologic evolution of North America, and the evolution of life on Earth.

GEOL 2380 Rocks and Minerals (4 Credits)
This class focuses on the identification, classification, and formation of common rock types and rock-forming minerals. Students will learn to reconstruct geologic conditions and earth history from rock and mineral features. Prerequisite: GEOL 1010, GEOG 1203 or permission of instructor.

GEOL 2400 Geology and Ecology of the Southwest (5 Credits)
This field class emphasizes firsthand observations of the interactions among environmental properties (including substrate geology, soils, and climate) and natural vegetation in the Colorado Front Range, Rio Grande Rift, and Chihuahuan desert regions of New Mexico and southeastern Arizona. The course also examines Pliocene and Quaternary volcanism in southern Colorado and New Mexico in addition to Paleozoic and Mesozoic geology along the uplands of the Rio Grande Rift. Prerequisite: permission of instructor.

GEOL 2800 Geology of National Parks (4 Credits)
The geology and landforms of the United States are not better illustrated than in our national parks. This course presents the physical and geological processes that have shaped many of our national parks. Focus of the course will include Yosemite, Grand Canyon, Rocky Mountain, Yellowstone, Grand Teton, Zion, and Bryce National Parks as well as selected others. Prerequisites: one of the following: GEOG 1203, GEOG 1217, GEOL 1010, an introductory course in geology, or instructor's permission.

GEOL 2992 Directed Study (1-10 Credits)

GEOL 3010 Process Geomorphology (4 Credits)
The land surface of Earth is continuously altered by geomorphic processes. This class focuses upon the nature of these processes, the work that they perform and the resulting landforms. In addition, the student becomes familiar with various methods of geomorphic analysis through the laboratory component of the class. Cross listed with GEOG 3910. Prerequisite: GEOL 1010, GEOG 1202 or permission of instructor.

GEOL 3100 Environmental Geology (4 Credits)
Environmental geology examines geologic hazards, both natural and those attributable to human impacts on the environment from urban and regional development. Specific topics may include disposal of municipal solid waste and radioactive waste; flood, earthquake, volcanic hazards; groundwater pollution and withdrawal; mass-wasting phenomena; and energy-related issues. Prerequisite: GEOL 1010, GEOG 1203 or instructor's permission.

GEOL 3200 Sedimentology/Stratigraphy (4 Credits)
This course reviews the origin, geologic history, and depositional environments of sediments and sedimentary rocks. Course work concentrates on the identification of sedimentary rocks and depositional environments by first-hand observations of rocks in the Denver area. Prerequisite: GEOL 1010, GEOG 1203 or instructor's permission.

GEOL 3300 Petroleum Geology (4 Credits)
This class examines the geological occurrences of petroleum including the origin, migration, and accumulation of oil and natural gas. This class differs from traditional petroleum geology classes by offering an examination of the economics and politics underlying the oil and gas industry, and by considering alternatives to traditional hydrocarbon resources. Prerequisite: GEOL 1010, GEOG 1203 or instructor's permission.

GEOL 3520 Erosion Process & Measurement (4 Credits)
Soil erosion is arguably the most serious environmental problem worldwide. This course focuses upon the significance of this problem, the factors affecting erosion rates, the nature of the processes themselves, methods of measurement, estimation of erosion rates and erosion control practices. Prerequisites: GEOG 1203, GEOG 1218, or GEOG 1266.

GEOL 3540 Hydrology (4 Credits)
This course provides an overview of the hydrologic cycle with emphasis placed on the study of applied hydrology. Discussions include the fundamental characteristics of precipitation, runoff processes, calculation of flood hazards, aquifers (porosity and permeability), the geologic settings of groundwater, the basic physics of groundwater flow, and water supply and use. Prerequisite: GEOL 1010, GEOG 1203 or instructor's permission. Recommended prerequisite: one introductory statistics course.
GEOL 3900 Geomorphology Seminar (1-5 Credits)
Hill slopes comprise the vast majority of the Earth’s land surface. It is upon these surfaces that nearly all of the human population must exist and, hopefully, flourish. Hill slopes assume various forms, and their shape influences their utility for various human endeavors. Numerous geomorphic processes operate upon hill slopes to determine their form, and human activities strongly influence the frequency and magnitude of these geomorphic processes. Consequently, hill slopes are an interface between the Earth and the human population. Prerequisite: GEOL 3010 or permission of instructor.

GEOL 3991 Independent Study (1-5 Credits)
GEOL 3992 Directed Study (1-10 Credits)

Department of History
Office: Sturm Hall, Room 366
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2347
Email: history@du.edu
Web Site: http://www.du.edu/ahss/schools/history

History analyzes the social, economic, political and intellectual changes that occur over the whole of recorded time. It prepares students to confront and manage change. The Department of History requires that students have an exposure to the broad sweep of human history, experience in comparisons across cultures, and a research seminar. The analytical and writing skills involved in a history major are valuable preparation for a number of fields. History graduates often pursue graduate work in a variety of fields, or enter careers in journalism, government, foreign service, international business, historic preservation, teaching or museum work.

History

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)

44 credits, including the following:

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2998</td>
<td>Issues in Comparative History</td>
<td>4</td>
</tr>
<tr>
<td>HIST 2990</td>
<td>What is History? (Must be taken winter quarter of junior year.)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 3989 &amp; HIST 3990</td>
<td>Senior Seminar I and Senior Seminar II (Only offered in Fall quarter)</td>
<td>8</td>
</tr>
<tr>
<td>HIST 3990</td>
<td>Senior Seminar II (Only offered in Winter quarter)</td>
<td>4</td>
</tr>
</tbody>
</table>

1000-level history course | 4
Two 2000-level history courses | 8
Two 3000-level history courses | 8
Electives | 8

Distribution Requirement

Of the previously listed courses, students must take at least one course in four of the following categories:

- Asian history
- European history
- American history
- Latin American history
- Middle Eastern history
- Pre-Modern history

Total Credits 44

1 Elective credits may come from any history department course, as well as approved study abroad courses.

2 See the department website for course listings by category. Students should consult with their faculty advisor or the department chair to make sure they have correctly fulfilled this requirement.

Students may be given elective credit for high school Advanced Placement (AP) or International Baccalaureate (IB) examination scores, at the discretion of the chair of the department. Ordinarily, no more than 4 credits of AP or IB work may go toward the history major.
Secondary Major Requirements
44 credits. Same requirements as for BA degree.

Minor Requirements
20 credits in history, of which at least 8 must be at the 2000 or 3000 level.

Courses

HIST 1110 Ancient Rome (4 Credits)
This course examines the history and culture of Rome from earliest times to the death of Augustus in A.D. 14. We look at political and military developments of Rome as it went from a monarchy, a republic, and an empire. We also study social and cultural aspects of the Romans, who originally were simple pastoralists living along the Tiber but in time became rulers of the entire Mediterranean region. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1220 Warring States and Middle Kingdoms (4 Credits)
The study of history at American universities has, in recent decades, moved beyond a narrow focus on Western civilization to embrace the study of broader world historical issues. Other academic disciplines have, to some extent, followed suit. Yet, despite the globalization of our lives and culture, the intellectual categories we normally employ to understand both the present and the past remain, to a considerable degree, bound by old restrictions. History—even world history—remains stuck in the past. This course aims to use concepts derived from East Asian history to interrogate and challenge received concepts and categories—not to impose another paradigm but to continue the quest for a better one. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1230 Asia and the Modern World (4 Credits)
This course considers the recent history of Asia in a broad world-historical context and, in doing so, asks students to examine commonly held assumptions about the nature (and presumed uniqueness) of the modern world and the "place" of Asia in it. The aim in doing so is to reconsider how we might better understand the past and the present. We proceed on two levels, using both primary and secondary sources. We critically examine Robert Marks' bold challenge to standard historiography, in "The Origins of the Modern World," for what it can teach us about the ongoing development of historical knowledge. We also dip into the past for primary documents—the stuff of historical analysis. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1240 Comparative History of Medicine (4 Credits)
This class examines the historical development of three different traditions of classical medicine: classical Western medicine (i.e. Hippocratic/humoral medicine), Indian Ayurveda, and Chinese medicine. Students learn about the intellectual, social, and technological changes that, by the early twentieth century, transformed classical Western medicine into a form of healing based on laboratory and hospital knowledge—what we today call modern medicine or biomedicine. Finally, we ask how, since that recent transformation, modern medicine and traditional medicine have come to coexist in different parts of the world. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1250 Food in East Asian History (4 Credits)
This class examines the relationship between food and health in East Asian history. We focus on how that relationship, and the way people understood it, changed over the past century and a half. In other words, we focus not only on how (and what) people in East Asia have eaten, but also on how they have thought about eating. This course asks how western dietary ideas and practices have interacted with traditional East Asian ideas and practices over the past century and a half. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1310 Crime and Punishment (4 Credits)
We focus specifically on the history of crime and the history of punishment by examining the nineteenth century (1800s), considered by many to be the great age of criminology and the era of the birth of the modern prison system. Over the course of the nineteenth century, the meaning of crime underwent a radical change; whereas in earlier periods, crime was synonymous with sin and criminals were prosecuted for offenses against the common good, by the nineteenth century, criminals were individuals who did what they did for all sorts of complicated reasons and the scope of crime extended to offenses against individuals, property, and morality. Not surprisingly, the nature of punishment changed to meet the shifting definitions of crime. Punishment became less about torturing the body and more about reforming the will or character of the individual criminal. We study this change over time by looking mostly at Britain and Europe, considered to be at the forefront in criminology and penology at the time. We examine the implications of the shifting meanings of crime and punishment by looking at the criminologists' own words, media coverage of crimes, and the opinions of historians and other contemporary thinkers. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1320 European Culture in the World Wars (4 Credits)
This course covers the history of Europe in the first half of the twentieth century—a time of crisis, extreme violence, and fascinating cultural production. Within the context of war, economic crisis and political extremism, we study the ways in which artists, writers, composers and film makers responded to the dramatic events they witnessed. We also examine European governments' attempts to shape public opinion through propaganda and mass media. This course counts toward the Analytical Inquiry: Society and Culture requirement.
HIST 1330 History of Ireland (4 Credits)
We examine the creation of modern Ireland from the 16th-Century to the present, including a brief discussion of the Celtic and Medieval periods. Major themes of analysis and discussion include changing definitions and representations of 'Irishness', competing questions of identity and national membership and how these debates influenced the development of various nationalist movements in both the past and the present. The role of women, gender, violence, emigration, and other social and geographical factors within Irish society are used to examine Ireland's evolution into a modern state and its relationship with the United States, Britain, and the rest of Europe. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1340 The British Monarchy (4 Credits)
This course explores the role of the monarchy in British society from Elizabeth I in the Sixteenth Century to Elizabeth II, the current Queen. We discuss how monarchs adapted to changing political situations and how they attempted to shape public perceptions. We also explore the ways in which expectations of the monarch have changed, from an almost absolute ruler to a constitutional monarch whose role has become largely ceremonial. Over the course of the nearly five hundred years covered in this period, Britain experienced a regicide, the forcible overthrow of a king, and a voluntary abdication, yet the institution of monarchy has proven remarkably resilient. In the twentieth century, as the royal family struggled with a series of scandals, some came to believe that the institution had run its course and was due for abolition, but today public fascination with royalty remains strong.

We focus on the relationship between the public image of the monarchy and its political role as a way of understanding broader changes in British society in the modern era. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1350 History of the British Empire (4 Credits)
This course explores the rise and fall of the British Empire from its origins during the English conquests of Wales, Scotland and Ireland; explorations of the world, through commercial expansion under the British East India Company; the rise of Britain as the preeminent world imperial power during the 19th century and its eventual decline and legacy during the late 20th century. Using a variety of secondary articles, primary sources, films and monographs, this course analyzes highly debated issues including the interconnected nature of British society and developments out in the Empire, both cultural and political; the important role that women, gender, and racial ideologies placed in British dominance of one quarter of the globe; how the empire and representations of Empire changed over the century; and finally, the impact of that empire upon issues of identity and population in a post-colonial Britain. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1360 World War One (4 Credits)
Historians have argued that the First World War definitively shaped the twentieth century. It set the stage for World War II; it redefined the role of government in citizens' lives; it brought technology full-force into power struggles between nations; it simultaneously birthed communism and fascism; and it desensitized entire generations to violence and brutality. In this class, students explore this very dramatic and influential war. Students unfamiliar with the war will more firmly grasp the historical significance of the event while students who may be familiar with the war will gain new insights and interpretation of how the war was conducted and why the war mattered. Students read the words and thoughts of those who participated in the war, as well as interpretations of the war by military, social, and political historians. This course counts toward the Analytical Inquiry: Society and Culture requirement. There are no prerequisites for this class.

HIST 1510 War and the Presidency (4 Credits)
This course examines four wars in American history and the relationship of those wars to the sitting presidents. Together we explore the reciprocal influence of Abraham Lincoln and the Civil War, Woodrow Wilson and World War I, Franklin Roosevelt and World War II, and Lyndon Johnson and the Vietnam War. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1520 Immigrant Voices in Modern America (4 Credits)
This United States has aptly been called "a nation of immigrants." In this course, we explore the immigrant experience of the last century by examining different forms of personal testimony--autobiographies, diaries, novels, personal correspondence, and oral histories. Listening to these various immigrant voices helps us to understand the processes at work as newcomers and their children (first- and second-generation immigrants) struggled to achieve economic stability and to define their identity as Americans. The course readings as well as the student projects are intended as instruments with which to assess the influence of old world customs, religion, education, work, gender and anti-immigrant prejudice in shaping the process of adaptation to American society. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1530 History of the United States since 1865 (4 Credits)
From the devastation left by slavery and the Civil War to the dizzying changes brought by globalization in our own time, this course sweeps through the last 150 years of the American experience. We wrestle with questions like the following: How did the Industrial Revolution, the Great Depression, two world wars and the Cold War change America, and ordinary Americans' everyday lives, and what legacies did these events leave for our own day? How have Americans defined and divided themselves--by race, gender, class, or otherwise--and how have such categories shifted over time? Where did we get our political parties and ideologies? Our work habits and habits of play? Our ideas about "big business," "big government," "American exceptionalism," or the "American dream"? As we consider these and other big questions, we also explore how historians make sense of U.S. history, and how we can make it relevant to our own times and our own lives. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1540 Society, Culture, and Popular Politics in the Making of Early America, 1607-1815 (4 Credits)
This course examines the foundations and development of American society and culture from 1607 to 1815. We study Native American societies and the establishment of European colonies in America, and the complex processes and events that led to the American Revolution and the creation of a republic in North America. Through class discussions, lectures, group work, and reading, we examine American society and culture from a variety of perspectives and viewpoints. Themes and topics include empire and colonization; race, gender, class; politics and society; and popular culture. This course counts toward the Analytical Inquiry: Society and Culture requirement.
HIST 1550 America in the Sixties (4 Credits)
This course examines one of the most tumultuous eras in U.S. history, its role in the reshaping of American life after World War II, and its legacies for the present. What constitutes “the sixties”? Was it an era of discord, dissolution, and decline, or of empowerment and democratization? Together we sort through conflicting perceptions of the period and closely examine some of the most salient issues of the decade - including the war in Vietnam, ethnic and race relations, youth culture, feminism and gay liberation, and the rise of conservatism. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1600 Jews in the Islamic World, 632 C.E. - 1948 C.E. (4 Credits)
This course deals with Jewish history in the Islamic world from the death of Muhammad to the establishment of the state of Israel. Students are exposed to the political, social, and economic histories of various Jewish communities, many of which no longer exist, in numerous Islamic empires and/or political units. While studying these communities we also compare the treatment of Jews under Islamic rule to the treatment of Jews under Christian rule and the treatment of Christians under Islamic rule. Cross listed with JUST 1600. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1610 The History of the Crusades: 1095-1300 (4 Credits)
This course traces the origins and development of the Crusading movement as well as its impact on Christian, Muslim, and Jewish society in Europe and the Middle East from the 11th through the 14th centuries C.E. This course also examines ideas of Christian/Muslim/Jewish difference in this period. We pay special attention to primary source material. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1630 Social Revolts in Latin America (4 Credits)
This course examines major revolutionary events that helped define the history of present-day Latin American. Major revolutions and rebellions, their agendas, underpinnings, accomplishments, and shortcomings are studied. The underlining interpretive lens is to understand the political, economic, and cultural forces at work that compelled revolutionary behavior to emerge. While covering a large time period, the course is structured along transformative historical cases which are closely analyzed. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 1992 Directed Study (1-10 Credits)

HIST 2000 Ancient Egypt (4 Credits)
This course examines the history and culture of ancient Egypt. We focus particularly on political and military developments during the Old, Middle, and New Kingdoms. We also study the social and cultural practices of the ancient Egyptians. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2015 Ancient Greece (4 Credits)

HIST 2022 The Roman Empire (4 Credits)
This course examines the history and culture of ancient Rome during the height of the empire. We look at political and military developments of Rome as it transformed from a republic into an imperial power. We also study social and cultural aspects of the Romans, who originally were simple pastoralists living along the Tiber but in time became the rulers of the entire Mediterranean region. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2030 Ancient Near East (4 Credits)
This course traces the history of the ancient Near East from the earliest civilizations in the Fertile Crescent down through the Persian Empire. Particular attention is given to the political, military, and social developments in the region as well as the cultural contributions of Mesopotamia to the history of the ancient Mediterranean world.

HIST 2107 Culture/Conscience in Vienna (4 Credits)
This study-abroad course focuses on the cultural and social history of the city of Vienna as the hub of politics, culture, and religion for Central Europe with special attention to its religious heritage as the seedbed for its rich cultural traditions. The course examines how its religious heritage, particularly Judaism, shaped its rich cultural heritage and the birth of modernism. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2107, JUST 2107.

HIST 2110 Europe in the Middle Ages (4 Credits)
Medieval European social, intellectual and political history.

HIST 2120 Europe in the Renaissance/Reformation (4 Credits)
Social, political, intellectual and cultural history.

HIST 2125 Cold War Europe (4 Credits)
Examines key issues in the history of Europe from the end of the Second World War to the disintegration of the Soviet Union. The clash of twentieth-century ideologies provides a framework for understanding European relations with the United States and the Soviet Union, along with broader political and cultural trends, decolonization, economic and social change, and class, gender, and race relations.

HIST 2131 Early Modern Europe: 1600-1789 (4 Credits)
Social, political and intellectual history of Europe during period of the Old Regime and Enlightenment.

HIST 2132 19th-Century Europe (4 Credits)
Social, political and intellectual patterns from French Revolution to outbreak of World War I.
HIST 2200 France: The Revolution-1900 (4 Credits)
This course covers the history of France from the late 18th century and the French Revolution to 1900. Although it is organized chronologically around French political history, we will address issues that transcend the various regimes: economic and social change, class and gender relations, anti-Semitism and other forms of racism, artistic production and cultural trends.

HIST 2242 American Jewish History (4 Credits)
This course will explore how the American Jewish experience developed and changed over time, from the colonial period to modern times. It will begin with the first group of Jews who arrived in 1654 in what is now New York and focus on successive waves of immigration, continuing through World War II, and the post-war period. We will explore the varied ways in which the immigrants and subsequent generations constructed their American Jewish identities, as well as such pivotal issues as acculturation, assimilation, and ethnic tensions. One of the major goals of the course is to encourage clear and effective writing, as well as to expose students to primary and secondary sources and offer tools to help evaluate evidence. Primary source materials relevant to each unit will be analyzed and reviewed at each class session. Cross listed with JUST 2242.

HIST 2245 History of the Modern Jewish Experience (4 Credits)
Concepts, documents, movements and practices of modern Jewish history. Cross listed with JUST 2245.

HIST 2272 Twentieth-Century France (4 Credits)
This course will address central issues in the history of France in the twentieth century, from the World Wars to the end of the Cold War. We will discuss the French search for grandeur as a former Great Power, examining political and cultural trends, decolonization, economic and social change, and class, gender and race relations.

HIST 2300 The Arab-Israeli Conflict: 1881-2000 (4 Credits)
This course aims to introduce students to the political, social, and cultural history of the Arab-Israeli conflict from the initial Jewish migration to Palestine in the 1880s through the Oslo Accords. Cross listed with JUST 2300.

HIST 2310 The Modern Middle East: 1798-1991 (4 Credits)
This course traces the history and development of the modern Middle East from Napoleon's invasion of Egypt in 1798 through the First Gulf War in 1991. We pay special attention to the impact of colonialism and Great Power diplomacy on the region. Cross listed with JUST 2310.

HIST 2320 US Foreign Policy in the Middle East (4 Credits)
This course aims to introduce students to both Middle Eastern history and American Foreign Policy by exploring the politics and culture of U.S. involvement in the Middle East in the post-WWII period. In doing so this course pays special attention to the impact of the Cold War on the Middle East, American policy towards the Arab-Israeli conflict, the role of oil in American foreign policy, American responses to the rise of Islamist movements, the impact of media and culture on the formulation of America's Middle Eastern policies, and U.S. relations with dictatorial governments in the Middle East. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2320.

HIST 2330 Islamic Empires (4 Credits)
This course offers students a historical introduction to the major empires of the Muslim world. Starting with an overview of the major empires of the late antique Mediterranean (Roman and Sasanid Persian), it provides students with a primer on the rise and major principles of Islam, turning to the Umayyad and Abbasid empires and their roles in supporting the institutionalization and sectarian developments of classical and early-medieval era Islam. Students then examine the emergence of the great Andalusi and North American empires, noting their long-lasting influence on Spain. The course culminates in a multi-week study of the three major early modern sources from each empire and considers the political, social, religious, and economic aspects of each. The course concludes with a look at contemporary attempts to remember or revive the notion of "Islamic empire," connecting past to present. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2113.

HIST 2380 Israeli History & Society: 1948-2011 (4 Credits)
Through historical sources, documentaries, movies and scholarly research, the course examines the major wars and clashes between Israel and its neighbors in the years 1948 to 2011. In this way, we will examine in depth the complexities of Israel's relationship with their Arab neighbor States, with a particular focus on the details of the Israeli-Palestinian conflict. Moving chronologically, the course aims to develop historical perspectives on the State of Israel, and the impact of emerging historical realities on Israeli society, including implications for religious identities, economics, political parties, security issues, and nationalistic movements. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2395 Contemporary India, 1947-2000 (4 Credits)
This course examines the history of India after independence from Britain in 1947. It traces the historical roots of the economy, society and polity of contemporary India. Understanding the hot button issues of the Kashmir conflict, nuclear weaponization, globalization and terrorism cannot be separated from and requires a historical grasp of the underlying processes of state formation, national identity, economic development and gender and social empowerment that have characterized India. While India will be the main focus, South Asia's shared colonial history and its legacies mean that the issues of regional tensions, ethnic and gender conflict, communal violence, secularism, the unevenness of electoral democracy and the fragility of civil society have wider application in the subcontinent as a whole. Therefore, the course constantly and continuously draws useful comparisons with events and processes in other South Asian nations such as Pakistan, Bangladesh, Sri Lanka, Nepal and Bhutan. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ASIA 2395.
For two centuries, an entity called “Costa Nostra” has dominated the histories of Sicily and Italy. Costa Nostra has long been a shadowy and poorly-understood organization, yet it has changed the world in dramatic and unexpected ways. In this class, students learn what the Italian Mafia is and explore its history in Italy, particularly the Mafia’s developing relationship to the law, the Italian government, and Sicilian culture. Students examine the nineteenth-century origins of the Mafia as well as the more recent “Mafia Wars” (1962-69 and 1970-82) that rocked Italy and resulted in the first widespread prosecution of Mafiosi. The recent trials of notorious Mafiosi have led to political scandal and charges of conspiracy, collaboration, and cover-up at the highest levels of Italian government. Lastly, students learn about the efforts of the Anti-Mafia movement to reform and redirect Italian and Sicilian culture and society.

HIST 2510 American History to 1789 (4 Credits)
Encounters between Native Americans, Europeans, and Africans in the American colonies; the Revolution, the confederation period; the framing and adoption of the Constitution.

HIST 2515 Print and Politics in the American Revolution (4 Credits)
This course examines the impact of the American Revolution on American society, politics, and culture. It combines social history with a print-centered approach to explore how different groups used newspapers, pamphlets, magazines, and other media to articulate their respective and at times competing needs and interests during the conflict. The sources for this course consist primarily of the seminal texts produced during the Revolutionary era. These writings range from Thomas Paine's pamphlet Common Sense and the Declaration of the Independence to the sermons of the African-American minister Lemuel Haynes and the letters exchanged between John and Abigail Adams. In addition to studying the key arguments forwarded in these texts, we focus on how their production, circulation, and reception influenced the outcome of Revolutionary events. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2520 American History: 19th Century (4 Credits)
Establishment and development of new nation; emphasis on political history; experience in analysis of source materials.

HIST 2525 Great Depression in America (4 Credits)
This course will investigate the social, political, economic, and cultural dimensions of the Great Depression in America. Students will be exposed to a variety of sources, including photographs, posters, film, fiction, and documentaries, as well as more traditional historical sources, both primary and secondary.

HIST 2530 American History: 20th Century (4 Credits)
This course surveys the major political and social developments in the United States since the turn of the century, including the Progressive Movement, World War I, the Depression and New Deal Liberalism, World War II, the Cold War and American internationalism, the Civil Rights Movement and the growth of feminism, the Great Society, the Vietnam War, and the Watergate crisis.

HIST 2535 Warfare and Society in Colonial America (4 Credits)
From the earliest English settlements to the struggle for independence, military strife and warfare have played a central role in shaping the course of American colonial history. Throughout this period, Anglo-Americans engaged in numerous conflicts, waging war against indigenous peoples, Europeans, and sometimes each other. For this course, we adopt the methodologies of "New Military History" - a discipline focusing on the interaction of warfare with society, politics, economics, and culture - to better understand the full impact and pervasive nature of colonial warfare. Our investigation therefore focuses on how the practices and heritage of warfare intersected with and influenced imperial rivalry, religious beliefs, cross-cultural encounters, racial formation, gender relations, as well as military strategy and technology, from 1607 to 1776. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2541 The Roots of Modern America (4 Credits)
This course surveys one of the most tumultuous periods in U.S. history, one that encompassed industrialization, massive immigration, urbanization, settlement in the American west, and the confrontation between Victorian and Modern culture. Special attention is paid to asking how political, cultural, and social dissent has been defined through time. Topics include Darwinism and social Darwinism, capitalism and its dislocations, agrarian and labor radicalism, cultural and political radicalism, the progressive movement, feminism, the home front during World War I, and the aftermath of the war.

HIST 2551 The American West Since 1860 (4 Credits)
Everyone knows the romantic and violent mythology of the Old West: cowboys and Indians, lawmen and gunslingers, trappers, miners, railroaders, homesteaders. This course explores the history behind the myths. Sweeping from the Civil War era to the resorts and suburb of today’s West, we follow such themes as the history of western land and resource use; the migration of peoples and the communities they created; the story of racial, religious, cultural, and political conflict; and the significance of those famous western myths to the nation as a whole.

HIST 2555 United States Since 1945 (4 Credits)
This course examines the social, cultural, economic and political developments that have shaped life in the United States since the 1940s. Special attention is given to the Cold War, suburban America, the civil rights movement, social conflict in the 1960s, and the rise of postwar conservatism.

HIST 2565 The Church in American History: Challenges and Changes in the Protestant Tradition (4 Credits)
For most of its history, a Protestant majority dominated religion in America. At times, Protestants seized new opportunities to shape and reshape the course of the nation. At other times, influence waned and tensions mounted. This course surveys the history of religion in the U.S. with a primary focus on the challenges and changes within the Protestant church as it has navigated a shifting and increasingly pluralistic culture. We explore how the faithful— from John Winthrop to the modern day evangelicals— have attempted to create a “city upon a hill” through their beliefs, practices, movements, and institutions. Special attention is given to Puritanism, disestablishment, revivalism, Mormonism, the Civil War, the Social Gospel, fundamentalism, civil rights, modern evangelicalism, and pluralism. Cross listed with RLGS 2565.
HIST 2570 Civil War & Reconstruction (4 Credits)
This course covers the causes and consequences of the most important conflict in American history. We will investigate the problem of slavery, the question of states' rights, the sectional crisis, the experience of war, the role of Lincoln, the struggle over reconstruction, and the meaning and memory of the war in American life.

HIST 2575 Yellow Jack and Black Vomit: Disease and the Making of Early America (4 Credits)
Scholars have recently focused their attention on the way that diseases - Yellow Fever, Smallpox, Measles, Malaria - shaped the social and political landscapes of early America. In this course, we take up this investigation by examining both the diversity and pervasiveness of disease and the ways that non-human agents such as pathogens and insects had a destructive impact on African, European, and Indian peoples and influenced the course of events in early America. Our study therefore ranges from the virgin soil epidemics that decimated indigenous peoples to how smallpox outbreaks affected the Revolutionary conflict. In addition to examining the medical discourse of causes, symptoms, and treatments, we consider how disease influenced perceptions of personal and familial interactions, race and class relations, community and public health, and national culture and literature. For our investigation, we pay particular attention to the 1793 Yellow Fever outbreak in Philadelphia.

HIST 2630 American Women's History (4 Credits)
This course is a survey of U.S. women's history from the colonial period to the present. It examines the social, cultural, economic, and political developments shaping American women's public and private roles over several centuries, in addition to the ways in which women gave meaning to their everyday lives. Particular attention is paid to the variety of women's experiences, with an emphasis on the interplay of race, class, ethnicity, and sexuality. Cross listed with GWST 2630.

HIST 2680 Historical Memory (4 Credits)
Why do successive generations rewrite the stories that teach Americans their history? Why do various social groups endorse alternate versions of past occurrences? This course explores the idea of historical memory by examining the narratives (stories) that have been composed about our country's past and how these stories have been revised over the years. We will focus on several major symbols of the American past and the narratives that have developed surrounding them. Our goals are to understand how and why these sites of memory have been interpreted and reinterpreted over the years.

HIST 2701 Topics in History (4 Credits)
HIST 2702 Topics in History (4 Credits)
HIST 2703 Topics in History (4 Credits)
HIST 2710 From Sea to Shining Sea: Nature in American History to 1900 (4 Credits)
In ways often hidden or ill understood, natural and environmental factors powerfully shaped the history of America from colonial times to the nineteenth century. In this course, we consider how natural resources like fish and forests became the basis for European empire-building; how colonists, Indians, slaves, settlers, and industrialists all acted to transform the landscapes and ecosystems of North America; and how ideas about nature helped mold the market economy and an emerging sense of American national identity. This course counts toward the Analytical Inquiry: Society and Culture requirement.

HIST 2720 Paved Paradise? Nature and History in Modern America (4 Credits)
Oil drilling and outdoor recreation, “medical miracles” and natural disasters, the making of national parks and suburban landscapes, and political battles over pollution, property rights, energy, wilderness, endangered species, and toxic waste all belong to the environmental history of the recent U.S. In this class we explore that history, weighing how Americans from the late nineteenth century to the present day have thought about nature, modified and made use of it, and competed for control of resources and land.

HIST 2810 Modern Japan (4 Credits)
Themes in early and late modern Japan--ideology and politics, culture and society, class and gender, empire and nation; Japan from Tokugawa peace through modern wars to post-war world. Cross listed with ASIA 2403.

HIST 2820 Contemporary Japan (4 Credits)
This course uses contemporary Japanese culture to examine political and social trends. Cross listed with ASIA 2404.

HIST 2850 Imperial China (4 Credits)
In this class, students learn about change and continuity in imperial China, from the third century BC to 1911 AD. Over the course of this more than two thousand years, what we refer to as "China" changed a great deal politically, economically, and socially. We will explore many of these changes, while at the same time keeping an eye on the continuities that continued to characterize the place and its people over the long term. Among the topics students can expect to learn about in this course are: Who and what constituted “China” in different periods? How does the geography and climate of China differ from place to place? How was the imperial government organized, and how did the ruling family establish its legitimacy? How did different forms of religion--including Daoism, Buddhism, the state cult and popular practices such as ancestor worship--develop and relate to one another? How did the Chinese empire interact with the nomadic peoples and states on its borders? How did the role and treatment of women in Chinese society change, and what has remained the same?.

HIST 2870 Modern China (4 Credits)
In this class we focus on China from the nineteenth century to the present. We examine historical change and continuity, including the revolutions that created the Republic of China and the People's Republic of China, the transformation of traditional values, changes in the status of women, economic liberalization in the post-Mao Zedong era, and the political, social, and environmental challenges that China has faced in recent years. Cross listed with ASIA 2870.
about femininity and masculinity in the early modern period and consider how those changes related to broader shifts in culture and society.

It is easy to assume that today's ideas about gender roles have always existed, but beliefs about women's and men's "natural" behavior have changed dramatically over time. In 1500, for instance, it was a well-known fact that women are sexually voracious creatures who needed strict control to keep their appetites in check; by 1800, it was an equally well-known fact that women are inherently chaste and modest. The ideal male in 1500 was someone dramatically over time. In 1500, for instance, it was a well-known fact that women are sexually voracious creatures who needed strict control to keep their appetites in check; by 1800, it was an equally well-known fact that women are inherently chaste and modest. The ideal male in 1500 was someone who used violence to maintain his authority; in 1800, masculinity was about self-discipline and politeness. In this course, we explore changing ideas how they function as both literary and historical texts. We also discuss the major developments in Greek military and political institutions and how these changes related to broader shifts in culture and society.
HIST 3350 Social History-Modern Britain (4 Credits)
This course investigates the intersections of class, gender, and race in nineteenth-century British society. During this period, Britain became the preeminent world power thanks to its spectacular industrialization and its even more impressive empire. Such success often fostered smugness and complacency, yet British society was also riddled with dissonance as people struggled to cope with the enormous changes they were witnessing. Discussions focus on the ways in which Victorian people themselves understood their society and its problems, and how they attempted to construct solutions to those problems. Who was implicitly or explicitly excluded from British society? As we consider these topics, we use a variety of secondary and primary sources, including fiction; one goal of the course is for us to think about how to integrate different kinds of sources as we analyze historical problems and create our own interpretations. Cross listed with MUAC 3350.

HIST 3370 Comparative Fascism in Europe (4 Credits)
A comparative survey of fascist Italy and Nazi Germany, from the origins of fascist movements in the 19th century to the establishment of political regimes, World War II and the Holocaust.

HIST 3372 Nations and Nationalism (4 Credits)
This seminar will focus on the twin processes of nation-building and nationalism in Europe. We will look at how the idea of an organized nation-state took root and how people came to think of themselves as belonging to a particular nation. We will examine these processes by using different national examples and by taking a variety of approaches—cultural, social, political—to understanding what a nation is.

HIST 3375 Empire: Revolt and Repression (4 Credits)
This seminar explores imperialism through case studies of European powers' repression of anti-colonial revolts. We study, for example, the case of Algeria, which gained independence from France in 1962 after a brutal war of independence. We discuss the establishment and nature of the empire in the mid-nineteenth century, the moderate decolonization movement beginning in the early twentieth century, and the radical revolt of the 1950s that prompted the French to use torture in counter-terrorism operations. This case study also is relevant to post-9/11 U.S. foreign policy, when the George W. Bush administration was widely condemned for its use of "enhanced interrogation techniques" at Guantanamo Bay and other detention sites. Facing criticism from around the world, Secretary of Defense Donald Rumsfeld studied the history of French operations in Algeria and the French response to allegations of human rights abuses. In light of this recent history, we examine the lessons that the history of French Algeria teaches us about war, terrorism and counter-terrorism in our own times.

HIST 3380 World War II History & Memory (4 Credits)
This seminar examines the ways in which people have commemorated the events of World War II, reflected upon the war's tragedies and honored its victims. The geographical area changes, and may include France, Germany, Russia, Italy, Britain, the United States or Japan. Students will analyze a variety of sources, such as diaries, memoirs, poetry, radio and television broadcasts.

HIST 3510 American Revolution and Its Background (4 Credits)
Causes, progress, consequences and significance of movement for independence in light of American colonial experience and problems of imperial authority.

HIST 3570 American Thought and Culture (4 Credits)
This course exposes students to writers, artists, philosophers, and reformers who have addressed some of the major intellectual and cultural transformations related to modernity: the problems of knowledge and communication, the struggle to achieve a democratic and equal community, and the endeavor to build a national culture.

HIST 3572 Nations and Nationalism (4 Credits)
This seminar will focus on the twin processes of nation-building and nationalism in Europe. We will look at how the idea of an organized nation-state took root and how people came to think of themselves as belonging to a particular nation. We will examine these processes by using different national examples and by taking a variety of approaches—cultural, social, political—to understanding what a nation is.

HIST 3573 Celebration: American Holidays (4 Credits)
This course examines the invention, celebration and commercialization of various sorts of American holidays - as a means of addressing larger questions of ethnic and national identity, the transformation of public memory, and the rise of consumer culture.

HIST 3600 United States - Israeli Relations, 1948-Present (4 Credits)
This course deals with the history of United States-Israeli relations from 1948 - 2011. Some of the key topics covered include: the U.S. decision to recognize Israel; cultural foundations for U.S. support of Israel; Christian Zionism; the origins of the U.S.-Israeli "Special Relationship"; the Cold War in the Middle East; U.S. peacemaking successes and failures; the role of the pro-Israeli lobby; and the impact of September 11, 2001 on U.S.-Israeli relations. Cross listed with JUST 3600.

HIST 3670 The U.S. Home Front in World War II (4 Credits)
This course examines the social changes taking place on the U.S. home front between the late 1930s and 1940s, including an investigation of the effects of war on American government, society, culture, and economy. Particular attention is paid to the war's impact on gender, ethnicity, race, and everyday people's lives.

HIST 3680 The Strange History of American Suburbia (4 Credits)
Everyone knows the emblems of American suburbia: single-family houses with attached garages, grassy lawns, curving streets and cul-de-sacs, office parks and shopping malls. But there's a history behind these settings that's poorly understood - that is key to understanding much about the U.S. Suburbia sheds light on American popular attitudes toward nature, technology, health, politics, and patriotism, and on the complicated dynamics of race, gender, family, class, and religion in American society. In this course, we explore how the U.S. became a "suburban nation," from the Romantic retreats of the nineteenth century, through suburbia's triumphant yet troubled "golden age" in the 1950s, to the stereotype-shattering suburbs of own time. We consider the surprisingly powerful ways suburbia history has shaped U.S. history more broadly.
HIST 3703 Topics in History (4 Credits)
HIST 3704 Topics in History (4 Credits)
HIST 3705 Topics in History (1-4 Credits)

HIST 3861 American Occupation of Japan (4 Credits)
Studies the important issues in a vital period of both U.S. and Japanese history. Cross listed with ASIA 2414.

HIST 3980 Internship (1-8 Credits)

HIST 3989 Senior Seminar I (4 Credits)
Development of research skills and historiographical understanding; preparation for senior research seminar.

HIST 3990 Senior Seminar II (4 Credits)
Completion of a substantial research project, based on original sources. Students should consult their departmental mentor no later than beginning of spring quarter of their junior year to begin the formulation of the research project.

HIST 3991 Independent Study (1-10 Credits)

HIST 3993 History Honors Thesis (4 Credits)
Independent study specifically for graduating seniors wishing honors. Prerequisites: HIST 3989 and HIST 3990.

HIST 3995 Independent Research (1-10 Credits)

Fritz Knoebel School of Hospitality Management

Office: Joy Burns Center, Room 319
Mail Code: 2044 E. Evans Ave. Denver, CO 80208
Phone: 303-871-4791
Email: janeen.todd@du.edu
Web Site: http://daniels.du.edu/academic-programs/undergraduate/majors-minors/hospitality-management/

The Fritz Knoebel School of Hospitality Management has been preparing industry leaders since 1946. As part of the Daniels College of Business, The Knoebel School has been recognized nationally and internationally for its tradition of quality instruction, including the 2013 award for Best Educational Innovation at the Worldwide Hospitality Awards. The hospitality management program has as its foundation the core business discipline classes in the Daniels College. Within the major students select an area of focus from among Lodging/Resort Operations, Restaurant/Food & Beverage Management, and Sales & Marketing.

Hospitality Management

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 49 credits; maximum of 49 credits. Requirements include:

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRTM 1100</td>
<td>Exploring Hospitality Management</td>
<td>2</td>
</tr>
<tr>
<td>HRTM 1120</td>
<td>Distinguished Lecture Series</td>
<td>1</td>
</tr>
<tr>
<td>HRTM 1200</td>
<td>Industry Work Experience</td>
<td>0</td>
</tr>
<tr>
<td>HRTM 2201</td>
<td>International Experience</td>
<td>0</td>
</tr>
<tr>
<td>HRTM 2202</td>
<td>Management Intern Program</td>
<td>0</td>
</tr>
<tr>
<td>HRTM 2360</td>
<td>Managing the Restaurant Operation</td>
<td>4</td>
</tr>
<tr>
<td>HRTM 2401</td>
<td>Hotel and Resort Management</td>
<td>4</td>
</tr>
<tr>
<td>HRTM 2501</td>
<td>Managing Human Capital in Hospitality</td>
<td>4</td>
</tr>
<tr>
<td>HRTM 2502</td>
<td>Hospitality Cost Management</td>
<td>4</td>
</tr>
<tr>
<td>HRTM 2504</td>
<td>Hospitality Technology and Analytics</td>
<td>4</td>
</tr>
<tr>
<td>HRTM 3800</td>
<td>Hospitality Services Management</td>
<td>4</td>
</tr>
<tr>
<td>REAL 1700</td>
<td>The Business of the Built Environment</td>
<td>4</td>
</tr>
</tbody>
</table>

Areas of Focus: Select one of the three areas of focus listed below

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Course Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodging/Resort Operations</td>
<td>HRTM 2402, HRTM 3401, HRTM 3402</td>
</tr>
<tr>
<td>Hospitality Sales and Marketing</td>
<td>HRTM 2506, HRTM 2402, HRTM 3503</td>
</tr>
<tr>
<td>Restaurant/Food and Beverage Management</td>
<td>HRTM 2361, HRTM 3301, HRTM 3360</td>
</tr>
</tbody>
</table>

Electives
Select 6 credits of Hospitality Management electives.

Total Credits 49

Students are required to study abroad, typically for a semester, and complete 1000 hours of work split between the work experience and internship requirements.

Courses

**HRTM 1100 Exploring Hospitality Management (2 Credits)**
This is an introductory course designed to provide students with a broad overview of the hospitality industry and the various segments that comprise the industry. The course focuses broadly on travel and tourism; on the elements that make resorts what they are--food and beverage/restaurants; lodging; sales, marketing, and revenue management; spa and retail management--and on other facets of hospitality.

**HRTM 1120 Distinguished Lecture Series (1 Credit)**
Senior executives from various segments of the hospitality industry provide students with their insights about competition and challenges within the industry.

**HRTM 1200 Industry Work Experience (0 Credits)**
Faculty supervised work experience. Prerequisites: HRTM 1100 and completion of 500 hours of approved work experience.

**HRTM 1992 Directed Study (1-4 Credits)**

**HRTM 2201 International Experience (0 Credits)**
Students spend one quarter in an international setting taking courses while touring and observing overseas hospitality operations.

**HRTM 2202 Management Intern Program (0 Credits)**
Preferably, this internship is full-time, continuous employment for ten-weeks with a minimum of 400 hours and is designed to allow students to increase their exposure to the hospitality industry and continue to reconcile their classroom learning with industry practice. Prerequisites: HRTM 1200, degree checkpoint 2, minimum of 400 hours of approved management internship, and at least 1000 hours in total work experience and internship hours.

**HRTM 2321 Health and Food (3 Credits)**
Nutrients in foods and their metabolic functions; assessment of nutritional status and dietary adequacy; applications to phases of human life cycle; considerations of special groups such as athletes; diet fads and fallacies; considerations for food-service managers and customers. Prerequisites: HRTM 2360, HRTM 2401 and degree checkpoint 2.

**HRTM 2322 Cooking Well, Eating well (4 Credits)**
This course educates students about current food/health trends, basic nutrition, and trains them to produce healthy, restaurant quality meals. This course is for non-majors only.

**HRTM 2360 Managing the Restaurant Operation (4 Credits)**
In HRTM 1100, Exploring Hospitality Management, students are introduced to various aspects of restaurant/food and beverage management and basics about them. From here, we advance to a more thorough overview of the management of various food and beverage operations, specifically focusing on restaurants. Topics include safe food and beverage service, product specification and procurement, labor scheduling, revenue control and collection, and other management functions required for success in food and beverage operations. Prerequisite: HRTM 1100.

**HRTM 2361 Contemporary Cuisine (4 Credits)**
Judging by their high failure rate, restaurants can be one of the most difficult and complex businesses to manage. This course builds on previous food and beverage courses by providing hands-on experience running and managing a restaurant environment. Through the opening and running of two live restaurant operations for a night each, the course enables students to put into practice the managerial aspects of full-service restaurant operation, from menu planning and implementation to financial analysis, including systems, tools and reporting. Prerequisites: HRTM 2360 and HRTM 2401.

**HRTM 2401 Hotel and Resort Management (4 Credits)**
This course presents an overview of the management of a various lodging properties, specifically focusing on rooms division operations. The perspective taken is strategic perspective, identifying and considering issues of concern to general managers of all types of lodging properties, with a particular focus on profit maximization (yield/revenue management) and distribution channel management. The broader political, economic, social, and technological environments and trends and their impact on lodging operations are considered. The perspective is global and includes considering how lodging operations differ in various parts of the world. Prerequisite: HRTM 1100.

**HRTM 2402 Revenue Management (4 Credits)**
This course provides an introduction to the basic principles and practices of revenue management in the hotel and restaurant industry. Students acquire the fundamental analytical skills needed to apply revenue management concepts and methods in demand forecasting, pricing, and revenue optimization techniques in hotels and restaurants. Prerequisites: HRTM 2360, HRTM 2401 and ACTG 2300.

**HRTM 2501 Managing Human Capital in Hospitality (4 Credits)**
People are the heart of any organization and can be a source of competitive advantage, particularly in a hospitality environment. This course prepares students to develop and manage successfully the processes and systems that help hospitality firms develop a competitive advantage through people and build a service culture, including recruiting, selecting, onboarding, and developing employees in order to retain them in both union and non-union environments. Prerequisites: HRTM 2360 and HRTM 2401.
HRTM 2502 Hospitality Cost Management (4 Credits)
The use of industry statistics and a uniform system of accounts for hotels and restaurants to determine an operation's position in the marketplace. Prerequisites: HRTM 1100, HRTM 1200, HRTM 2360, HRTM 2401 and degree checkpoint 2.

HRTM 2504 Hospitality Technology and Analytics (4 Credits)
Hospitality Technology and Analytics serve as an introduction to hospitality technologies and technology-enabled data analytics. This course surveys diverse aspects of consumer-facing hospitality technologies (social media, mobile, distribution channel, sharing economy, etc.) and in-house systems of hospitality operation (event-planning system, property management system, and point-of-sale system, etc.) In addition, this course provides an introduction to the field of business intelligence and data analytics, which has been defined as the extensive use of data, statistical and quantitative analysis, and fact-based management to drive decisions and actions in the hospitality industry. Specifically, the course looks at the managerial aspects associated with the application of hospitality technologies and technology-enabled data analytics to achieve strategic business goals. Prerequisites: HRTM 1100, HRTM 2360, HRTM 2401, Daniels Checkpoint 2.

HRTM 2506 Event Sales and Services (4 Credits)
This course addresses all that is involved in the sales and production of catered events, trade shows, and meetings, from the perspective of planners, venue salespeople, and event managers. Students learn how to market and sell a venue; produce and respond to requests for proposals; work directly with clients during the booking process and event execution; address risk management and contractual issues; and perform other event and meeting sales and planning functions. Prerequisites: HRTM 2360, HRTM 2401 and MKTG 2800.

HRTM 2605 Hospitality E-business (4 Credits)
Advances in information technology (IT), the Internet, mobile technologies, and social media create opportunities and threats for hospitality organizations. Electronic business (e-business) addresses technology application in all aspects of a business and the guest lifecycle to expand market reach, achieve efficiencies and scale, grow revenues, manage relationships, and reduce labor to create value for the firm. This course focuses on hospitality technology trends, strategies, and tactics to support business-to-business (B2B), business-to-consumer (B2C), business-to-employee (B2E) interactions and commerce transactions through technology.

HRTM 2640 Franchising and Entrepreneurship (4 Credits)
The franchising and entrepreneurial aspects of hospitality ownership including franchising, franchising law, contracts, assessments, and ownership. Prerequisite: HRTM 2502.

HRTM 2992 Directed Study (1-4 Credits)

HRTM 3000 Wines of the World (4 Credits)
A survey course of the wines of the world, including old and new world wines; still, sparkling, dessert and fortified wines; viticulture and viniculture. Prerequisite: must be at least 21 years of age. Non-majors only.

HRTM 3301 Beverage Management (4 Credits)
Organization and management of the beverage operation of resorts, restaurants, hotels, clubs and other licensed premises. Emphasis on product knowledge, responsible beverage service, facility design and operational practices. Prerequisites: degree checkpoint 2, senior standing and must be 21 years of age.

HRTM 3302 Advanced Beverage Management (4 Credits)
This course helps students develop an understanding of the management of alcoholic beverage outlets in resorts, hotels, restaurants and clubs; it is a continuation of the introductory course and expands students' knowledge and experience with wines and spirits in commercial settings. Product knowledge continues to include the agricultural elements, production, and marketing of beverages containing alcohol. Topics relative to the social, cultural, political and economic aspects of alcohol and alcohol service are discussed. A significant component of those discussions is the duty to provide responsible service in both licensed premises and in social settings, including the social and legal ramifications of disregarding such duties. Field trips are an integral part of this course and attendance is expected. Prerequisites: HRTM 2361, HRTM 3301 and permission of instructor.

HRTM 3360 Restaurant and Food and Beverage Concept Development (4 Credits)
In previous food and beverage courses you obtained the knowledge and skills to perform the basic management functions required for a successful career in F&B operations, put these skills into practice and opened two “restaurants for a night.” In this course you will acquire the skills required to develop and brand a new restaurant. Prerequisites: HRTM 2361 and HRTM 3301.

HRTM 3401 Managing Mixed Use Properties (4 Credits)
This course is designed to introduce the student to the structure and management of mixed use resort/hotel properties. With the emergence of condo-hotels, timeshares, and private residence clubs, it is important for lodging professionals to understand the structure and ongoing management of these mixed use investments. In addition to the various types of hybrid hotels with some type of real estate component, the course examines the management of retail, fitness club, and other recreational facilities that have some membership component and/or serve the local community as well as hotel guests and property owners. Prerequisites: HRTM 2402 and degree checkpoint 2.

HRTM 3402 Hospitality Asset Management (4 Credits)
This course examines the fiduciary responsibilities associated with managing lodging operations to achieve ownership goals. The asset manager's role in building value is examined at both the portfolio and property levels. Guest speakers from the field provide insight into current lodging market and operational challenges. Prerequisites: HRTM 2402 and HRTM 3401.
HRTM 3503 Lodging Sales Management (4 Credits)
This course addresses all that is involved in the structure, management, and operation of resort/hotel sales departments, focusing on the tools, technical and interpersonal knowledge, skills, and abilities required of a sales manager and the strategic thinking and planning required of a director of sales. Prerequisites: HRTM 2402, HRTM 2506 and degree checkpoint 2.

HRTM 3560 Resort and Tourism Marketing (4 Credits)
In examining the tourism system the traditional 4 ‘Ps’ of marketing are recast to examine what makes a successful destination (Product), how services are priced (Price), how destinations promote themselves (Promotion) and the role of various channels of distribution (Place).

HRTM 3600 Lodging Valuation Principles (4 Credits)
This course introduces students to the basic fundamental analysis of methods and techniques of real estate investment, finance, and valuation as they apply to the lodging industry. The course covers time value of money, basic discounted cash flow techniques, financing instruments, appraisal methods, and valuation techniques for income producing lodging properties. Students utilize computer software and spreadsheets for solving real estate problems. Practical applications provide students with the analytical tools and techniques to make effective real estate investment and financing decisions. Prerequisites: ACTG 2300, FIN 2800, HRTM 2502, HRTM 2504 and degree checkpoint 2.

HRTM 3602 Facility Layout and Design (4 Credits)
Foodservice layout and design is related to operating issues, new building construction, and renovations. Prerequisites: HRTM 2501, HRTM 2502 and HRTM 2504.

HRTM 3650 Leadership in Hospitality (3 Credits)
This course provides students with the knowledge, skills, and attitudes necessary to undertake leadership responsibilities in complex organizations. This course applies concepts and methodologies from the social and behavioral sciences in the analysis of leadership behavior in diverse organizational and community settings. Prerequisites: HRTM 2501, HRTM 2502 and HRTM 2504.

HRTM 3675 Club Management (4 Credits)
Organization and operation of private, corporate and public clubs; history and evolution of club field, types of clubs, organizational structure, management roles; operations focus on management of diverse functions such as clubhouse, recreational facilities and entertainment; emphasis on the similarities and differences between club and other food and beverage operations. Prerequisites: HRTM 2501, HRTM 2502 and HRTM 2504.

HRTM 3700 Topics in Hospitality Mgmt (1-4 Credits)
Exploration of various topics and issues related to the hospitality industry.

HRTM 3800 Hospitality Services Management (4 Credits)
The evaluation, design, and management of service delivery systems through operations management topics from a service perspective. Included are other related topics such as customer satisfaction and managing organizational change. Prerequisites: degree checkpoint 2, HRTM 1100, HRTM 1120, HRTM 2360, HRTM 2401, HRTM 2501, HRTM 2502, HRTM 2504 and one of the following: HRTM 3301 or HRTM 3401 or HRTM 2402 and HRTM 2506.

HRTM 3991 Independent Study (1-10 Credits)
Independent research/study; requires written report. Prerequisite: instructor's permission.

HRTM 3992 Directed Study (1-10 Credits)

Innovation and Entrepreneurship

The university-wide entrepreneurship minor at Daniels focuses on action, decision-making, experimentation, and hypothesis testing in the face of an uncertain future within a business context. Students who complete the entrepreneurship minor will understand how to shape the business, economic, political, and social context along with the creation of their products or services. To help students understand how to start successful businesses or to innovate within existing businesses, the entrepreneurship minor offers courses from several different perspectives such as financial, legal, marketing, and leadership.

Entrepreneurship

Minor Requirements

24 credits, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1000</td>
<td>Gateway to Business ¹</td>
<td>4</td>
</tr>
<tr>
<td>EVM 3350</td>
<td>Creating New Markets: The Messy Start-Up</td>
<td>4</td>
</tr>
<tr>
<td>EVM 3360</td>
<td>Business Law for Entrepreneurs: Legal Issues for Emerging Businesses</td>
<td>4</td>
</tr>
<tr>
<td>EVM 3380</td>
<td>Leadership, Management, and Execution: Final Project (BP)</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Select 4 credits from the following or other approved courses in consultation with your advisor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLC 2003</td>
<td>Creativity &amp; Entrepreneurship III</td>
</tr>
</tbody>
</table>
Courses

EVM 3350 Creating New Markets: The Messy Start-Up (4 Credits)
Designed for the advanced DU student who is interested in becoming an entrepreneur, this course is based upon actually starting a company, launching a product, creating a market, and learning how to embrace failure and manage uncertainty. In this hands-on course, student teams will actually create and run their own startups. All types of businesses are welcome: retail, services, technology, hospitality, etc. Class discussion, presentations, and guest speakers will explore the principles of planning, testing, measuring, analyzing, and rapidly iterating. Reading materials will include a wide range of books, cases, blogs, and aggregators. Startups require significant effort, commitment and passion. This class is no different: this is the real thing! Prerequisites: LGST 2000 and degree checkpoint 2.

EVM 3351 Planning the New Venture (4 Credits)
In this course, students will encounter the conceptualization, development, documentation, and presentation of the business plan for an innovative new business initiative. Students will submit their plan to a panel of experienced professionals and receive critical feedback. Cross listed with EVM 4351. Prerequisite: EVM 3350.

EVM 3360 Business Law for Entrepreneurs: Legal Issues for Emerging Businesses (4 Credits)
This course will highlight the legal and business issues entrepreneurs face as they conceive and launch a new venture. Using real world scenarios, we will explore issues throughout the new venture lifecycle from pre-formation, organization and financing to intellectual property, employment issues, regulatory environment, and exits. The course is designed for students who want to start, join, or invest in a start-up or new business during their career. The goal is to develop an understanding of legal concepts necessary for decision making around the multitude of issues that entrepreneurs and would-be entrepreneurs face including an understanding of how the law can help and possibly hinder new enterprise creation. Prerequisites: BUS 1000.

EVM 3370 Metrics & Financial Tools for an Emerging Business: Accounting and Finance for the Emerging Business (4 Credits)
Students are taught to link physical activity occurring in the business venture to the movement of numbers on financial statements. They draft 3 years of flexible profit and loss, cash flow, and balance sheet statements; Year 1 is monthly, Year 2 is quarterly, and Year 3 is one annual period. Students learn how to visualize the activity, metrics, and assumptions needed to support the customer experience they intend to build and how these numbers flow through their financial statements including: Generating revenue leads; Convert leads to sales; Producing the product/service; Delivering the product/service; Converting customers into repeat business; Set-up and maintain Quick Books. Cash impact of corporate governance costs (indirect) are included, such as risk management (insurance), employee benefits and compensation, facilities, technology, legal and capital expenditures, etc., understanding the tax implication of setting up different governance devices and understanding recapitalization and its implications. Students learn to identify activity metrics to drive cash basis break-even for daily, monthly, and annual periods. They will also learn how to create a Use of Funds Statement linked to their proforma’d financial statements. Students will learn different types of financing and under which circumstances these types are used-credit cards, factor loans on inventory, bank loans- including small business administration loans, angel funding, and venture capital funding. Exit strategies like M&A and IPO will also be covered. Prerequisites: BUS 1000.

EVM 3380 Leadership, Management, and Execution: Final Project (BP) (4 Credits)
The final course in the entrepreneurship minor is a project based course designed to cultivate, coordinate, and integrate The University of Denver's diverse resources for the development and application of more creative entrepreneurial behavior and achievement. It builds on the overlap of three clusters of programs: business, engineering, and music. After having completed the other four courses in the minor, the final course offers an opportunity for students to form multidisciplinary entrepreneurship project teams (E-Teams) for transforming products or projects into practical realities, and to interact with alumni and community entrepreneurs. In this course, each E-Team project group develops a comprehensive business or operational plan for its entrepreneurial venture based on projects from engineering, music, and approved business school projects. Students are required to write and defend their business plan for a panel of potential investors. This course incorporates wisdom, insight, and experiences for successful entrepreneurs and explains the benefits and risks involved in the proposed entrepreneurship ventures. Students in the course will be based in the college where the project originates. However, student teams, regardless of where they are based, will be required to meet with an advisor in Daniels College of Business three times during the quarter to get counsel on their business plan project. In addition, students will be required to attend speaker series comprised of three outside entrepreneurship speakers. Finally, the course culminates with presentations to successful entrepreneurs who will judge the merits of the business. Prerequisites: BUS 1000.

EVM 3700 Real Business Cases in Entrepreneurship (4 Credits)
The Real Business course is designed to provide students with an opportunity to examine entrepreneurial business challenges through case studies, guest speakers, discussions and field experiences. In addition to standard entrepreneurship start-ups, the course will cover international start-ups, gender issues relating to start-ups as well as fostering an entrepreneurial spirit in large organizations. Throughout the course, entrepreneurship will be examined from the perspective of business challenge as well as career choice. Prerequisites: EVM 3351 and degree checkpoint 2.

EVM 3704 Topics in Innovation and Entrepreneurship (1-4 Credits)
This course is custom designed to address topics that are currently in demand, such as social entrepreneurship, financing the startup after the Wall Street greed bust, finding angel investors and venture capitalists in Colorado, preparing for a pitch to investors, moving beyond startup stage, and others. Prerequisites: LGST 2000 and degree checkpoint 2.

BSBA and BSAC students complete BUS 1000 as part of the business core.
**EVM 3710 Innovation/Creativity-Business (4 Credits)**
This course is about identifying and creating customer needs, looking for innovative ways to address these needs, and pursuing those approaches that appear to have real profit potential. There are exercises to address and stimulate creativity, discussion of organizations that are considered to be creative businesses, and critical evaluation of the hurdles they face and the techniques they use. The course also includes innovative approaches to organizational effectiveness. Cross listed with EVM 4710. Prerequisites: LGST 2000 and degree checkpoint 2.

**EVM 3991 Independent Study (1-10 Credits)**
Student devises and completes a special learning project under faculty supervision. Topic and outline must be approved by supervising instructor and department. Prerequisite: EVM 3351.

**EVM 3992 Directed Study (1-4 Credits)**

---

**Integrated Sciences**

Integrated sciences is an interdisciplinary major designed for the student who desires general preparation for a career in an allied-health or science-related field, including physical therapy, occupational therapy, physician-assistant programs and nursing. In addition, students interested in teaching science at the primary, middle school or secondary level can benefit from the broad spectrum of courses available through the major.

**Advising**
The curriculum for the bachelor of arts in integrated sciences is tailored to the student in accordance with the requirements for the major listed below. Students usually work with a faculty advisor from the Department of Biological Sciences to design a curriculum that fits each student’s career aspirations. See the chair of biological sciences (p. 93) for advising.

**Integrated Sciences**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

A total of 60 credits in approved science disciplines is required; hence majors are not required to pursue a minor. Courses may be selected from the following departments: biological sciences, chemistry and biochemistry, engineering, geography/geology, and physics and astronomy. The 60 credits must be distributed in the following way: a minimum concentration of 20 credits each from two different science departments with a minimum of 30 upper-division credits (2000 level or above). Integrated sciences majors are required to complete the general education requirements stipulated for science majors pursuing a BA.

---

**Intercultural Global Studies**

Office: Sturm Hall, Room 486C  
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208  
Phone: 303-871-2855  
Email: emcees@du.edu  
Website: http://www.du.edu/ahss/igs

The Intercultural Global Studies minor, housed in the Division of Arts, Humanities and Social Sciences, represents an innovative interdisciplinary approach to understanding cultural similarities and differences of diverse groups living in the United States and throughout the world. In an increasingly interconnected society, this minor serves to develop essential intercultural critical and analytical skills and to bridge the gap between the knowledge of these skills and their application through coursework and structured domestic and international engagement experiences. The purpose of the minor is to integrate and complement the student’s major fields of study with humanistic and social science training in navigating today’s global society.

**Intercultural Global Studies**

When you declare a minor in Intercultural Global Studies (IGS), we assign you a faculty advisor. Your advisor helps you build a cohesive, interdisciplinary set of courses.

**Minor Requirements**

24 credits, including the following:

<table>
<thead>
<tr>
<th>Introductory Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2010</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ARTH 1010</td>
<td>Images of Culture</td>
</tr>
<tr>
<td>COMN 1700</td>
<td>Fundamentals of Intercultural Communication</td>
</tr>
<tr>
<td>GEOG 1410</td>
<td>People, Places &amp; Landscapes</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>PLSC 1110</td>
<td>Comparing Politics around the World</td>
</tr>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
</tr>
</tbody>
</table>

**Engagement Experience**

Approved domestic or international internships or service learning projects

**Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2000</td>
<td>Pioneers of Anthropology</td>
</tr>
<tr>
<td>ANTH 2060</td>
<td>Human Migration</td>
</tr>
<tr>
<td>ANTH 2061</td>
<td>Gender, Change, Globalization</td>
</tr>
<tr>
<td>ANTH 3550</td>
<td>Africa: Peoples and Cultures</td>
</tr>
<tr>
<td>ARTH/ENGL 2613</td>
<td>Excavating Italy</td>
</tr>
<tr>
<td>ARTH 3815</td>
<td>American Art and Religion</td>
</tr>
<tr>
<td>ARTH 3862</td>
<td>Mesoamerican Art</td>
</tr>
<tr>
<td>ARTH 3867</td>
<td>Native American Art</td>
</tr>
<tr>
<td>ARTH 3868</td>
<td>Art of the Andes</td>
</tr>
<tr>
<td>COMN 2210</td>
<td>Gender, Communication, Culture</td>
</tr>
<tr>
<td>ECON 2300</td>
<td>Comparative Economic Systems</td>
</tr>
<tr>
<td>ECON 2500</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECON 2510</td>
<td>The Asian Economies</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>International Economics</td>
</tr>
<tr>
<td>ENGL 3320</td>
<td>Oral Literature and Orality in Literature</td>
</tr>
<tr>
<td>GWST 1112</td>
<td>Introduction to Gender and Women's Studies</td>
</tr>
<tr>
<td>GEOG 1410</td>
<td>People, Places &amp; Landscapes</td>
</tr>
<tr>
<td>GEOG 2320</td>
<td>Andean Landscapes</td>
</tr>
<tr>
<td>GEOG 2810</td>
<td>Geography of Latin America</td>
</tr>
<tr>
<td>GEOG 2830</td>
<td>Geography of Europe</td>
</tr>
<tr>
<td>GEOG 3870</td>
<td>Water Resources &amp; Sustainability</td>
</tr>
<tr>
<td>GEOG 3425</td>
<td>Urban Sustainability</td>
</tr>
<tr>
<td>GEOG 3720</td>
<td>Mountain Environments and Sustainability</td>
</tr>
<tr>
<td>GERM 1416</td>
<td>German Civilization: History, Politics, and Culture</td>
</tr>
<tr>
<td>GERM 2022</td>
<td>German Cinema: An Introduction to German Culture, History, and Politics through Film</td>
</tr>
<tr>
<td>GERM 2350</td>
<td>German Film</td>
</tr>
<tr>
<td>GERM 3125</td>
<td>Einigkeit, Recht, Freiheit: German Culture &amp; Society 1815-1871</td>
</tr>
<tr>
<td>GERM 3225</td>
<td>Das Kaiserreich: German Culture &amp; Society 1871-1918</td>
</tr>
<tr>
<td>GERM 3325</td>
<td>Die Weimarer Republik: German Culture &amp; Society 1918-1933</td>
</tr>
<tr>
<td>GERM 3425</td>
<td>Nachkriegsdeutschland: German Culture &amp; Society 1945-1990</td>
</tr>
<tr>
<td>GERM 3525</td>
<td>Die Berliner Republik: German Culture &amp; Society 1990-today</td>
</tr>
<tr>
<td>HIST 2015</td>
<td>Ancient Greece</td>
</tr>
<tr>
<td>HIST 2022</td>
<td>The Roman Empire</td>
</tr>
<tr>
<td>HIST 2955</td>
<td>Latin America at the Movies</td>
</tr>
<tr>
<td>ITAL 2201</td>
<td>20th-Century History and Culture</td>
</tr>
<tr>
<td>ITAL 2355</td>
<td>Images of Rome in Literature &amp; Film</td>
</tr>
<tr>
<td>ITAL 3350</td>
<td>Italy through Cinema</td>
</tr>
<tr>
<td>JAPN 2100</td>
<td>Conversation and Composition I</td>
</tr>
<tr>
<td>JAPN 2600</td>
<td>Conversation &amp; Composition II</td>
</tr>
<tr>
<td>JAPN 3100</td>
<td>Advanced Conversation &amp; Composition</td>
</tr>
<tr>
<td>JUST 2030</td>
<td>Spaces of Memory: Texts and Contexts of Argentina's Dirty War</td>
</tr>
<tr>
<td>JUST 2350</td>
<td>Israeli Culture Through Film: Society, Ethnicity, and Inter-Cultural Discourse</td>
</tr>
<tr>
<td>JUST 2360</td>
<td>Israeli Society Through Film: Narratives of the Holocaust, War and Terror in Israeli Life</td>
</tr>
<tr>
<td>MUAC 2057</td>
<td>Musicology: Introduction to World Musics</td>
</tr>
<tr>
<td>MUAC 3494</td>
<td>Music and Belief in World Cultures</td>
</tr>
<tr>
<td>MUAC 3497</td>
<td>Studying Music in the Field: Theory and Method in Ethnomusicology</td>
</tr>
<tr>
<td>MUAC 3498</td>
<td>Music, Dance, and Everyday Life in South Asia</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>MUAC 3502</td>
<td>Gender &amp; Genre in World Music</td>
</tr>
<tr>
<td>MUAC 3535</td>
<td>Musics of the African Diaspora</td>
</tr>
<tr>
<td>MUEN 3041</td>
<td>North Indian Classical Ensemble</td>
</tr>
<tr>
<td>MUEN 3043</td>
<td>Senegalese Drum/Dance Ensemble</td>
</tr>
<tr>
<td>PHIL 3111</td>
<td>Contemporary Continental Philosophy: The Figure of the Migrant</td>
</tr>
<tr>
<td>RLG 2108</td>
<td>Islam in the United States</td>
</tr>
<tr>
<td>RLG 2109</td>
<td>Religions of Tibet</td>
</tr>
<tr>
<td>RLG 3500</td>
<td>Islam</td>
</tr>
<tr>
<td>RLG/JUST 3890</td>
<td>Religion and Diaspora</td>
</tr>
<tr>
<td>SOCI 2320</td>
<td>Race and Ethnic Relations</td>
</tr>
<tr>
<td>SOCI 2719</td>
<td>Social Movements</td>
</tr>
<tr>
<td>SOCI 2730</td>
<td>Gender in Society</td>
</tr>
<tr>
<td>SPAN 2300</td>
<td>Iberian Culture &amp; Civilization</td>
</tr>
<tr>
<td>SPAN 3300</td>
<td>Travel Narratives</td>
</tr>
<tr>
<td>SPAN 3420</td>
<td>Contemporary Film in Spain</td>
</tr>
</tbody>
</table>

**Total Credits: 24**

1 Please consult with your ICGS advisor and the schedule of classes for additional courses which may meet these requirements.

### Josef Korbel School of International Studies

Office: Ben M. Cherrington, Suite 101  
Mail Code: 2201 S. Gaylord St. Denver, CO 80208  
Phone: (303) 871-4495  
Email: baints@du.edu  
Web Site: http://www.du.edu/korbel/programs/bachelors

We interact with the global community in a thousand different ways every day. We connect with friends near and far via computer and phone. We view updates on elections and currency crises, we track the spread of diseases and civil unrest, and we even follow the latest in music and dance from blogs and videos posted by people around the world. We do this using devices designed by international teams and built with materials and components from dozens of countries. We are part of a truly globalized planet.

The sheer volume and the speed of trans-border movement of people, products and data mean that no country or individual exists as an island isolated from international forces. Our interdependence is a fact of life. The challenges of the 21st century are great: from controlling weapons of mass destruction to minimizing the impacts of climate change, from managing borderless trade and investment to tackling entrenched poverty and food insecurity, modern issues require international cooperation and collective solutions.

The BA program in international studies offers undergraduate students at the University of Denver critical knowledge and skills for succeeding in a world that has gone global. Understanding how global institutions and exchanges work, and bringing an international perspective to one’s professional development is a necessity for modern life. DU’s International Studies curriculum gives students this foundation. Join us to learn about international events that directly affect your life.

Students are required to complete a minimum of 44 credits in international studies to fulfill the major requirements. Students must also choose a specialization within the broad field of international studies. Specialization areas include global political economy and international politics; international health and development; and international organizations, security, and human rights. In addition, students are required to complete an approved study abroad program, as well as attain intermediate proficiency in at least one foreign language. Students should verify detailed requirements with the department.

### Graduate Degree Options for Undergraduate International Studies majors

Whether you are following a traditional four-year plan or are moving through your undergraduate degree at an accelerated pace, we offer two pathways for qualified international studies majors to earn a master of arts degree at the Josef Korbel School of International Studies (via the Dual Degree BA/MA Program in INTS (http://www.du.edu/korbel/programs/dual.html) or the Priority MA Admission (http://www.du.edu/korbel/admission/priority.html) option). Prospective students must be in touch with their advisor early on for planning purposes and must meet normal standards of graduate admission at the time of application. For specific requirements, please contact the BA program in international studies.
International Studies

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

44 credits required as follows:

**INTS majors must successfully complete the following coursework and requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTS 1500</td>
<td>Contemporary Issues in the Global Economy</td>
<td>4</td>
</tr>
<tr>
<td>INTS 1700</td>
<td>Introduction to International Politics</td>
<td>4</td>
</tr>
<tr>
<td>INTS 2975</td>
<td>Global Issues Research Practicum</td>
<td>4</td>
</tr>
</tbody>
</table>

At least three INTS courses in the student’s selected area of specialization

Select at least five additional INTS courses as electives toward the major.

Total Credits: 44-60

**Additional Requirements**

**Foreign Language Proficiency Requirement**

International Studies majors are required to demonstrate intermediate level proficiency in at least one foreign language. This is not necessarily a credit-bearing requirement. Any coursework taken to satisfy the international studies foreign language proficiency requirement will be in addition to the 44 minimum credit hours required for the major. This requirement may be satisfied one of two ways: (1) if a student completes the intermediate sequence of courses in one foreign language at the University of Denver with “C-“ or better, or (2) if a student successfully tests-out of the intermediate level of foreign language offered at DU via the undergraduate placement exam (administered by the Center for World Languages and Cultures (p. 412)).

**Study Abroad Requirement**

Students are required to complete an approved study abroad program. Coursework must be pre-approved by the department prior to the start of the study abroad program.

**Minor Requirements**

20 minimum credits:

**INTS minors must successfully complete the following coursework:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTS 1500</td>
<td>Contemporary Issues in the Global Economy</td>
<td>8</td>
</tr>
<tr>
<td>INTS 1700</td>
<td>Introduction to International Politics</td>
<td>12</td>
</tr>
</tbody>
</table>

Select at least three additional INTS courses as electives toward the minor.

Total Credits: 20

**Courses**

**INTS 1500 Contemporary Issues in the Global Economy (4 Credits)**

Introduction to a range of pressing problems and debates in today’s global economy, such as global economy, global markets and the global commons. Students will have a good understanding of the policy challenges posed by global economic integration and theoretical frameworks for understanding the functioning of the global economy.

**INTS 1700 Introduction to International Politics (4 Credits)**

Central concepts and major theories to assist in organizing an understanding of international politics including balance of power, international organizations, foreign policy decision making, and conflict theory; application of current topics.

**INTS 2160 Labor in the Global Political Economy (4 Credits)**

This course explores and examines the role of labor in different parts of the global economy. According to world systems theory (Wallerstein et al.), there is a global division of labor into three zones: (1) core (essentially the wealthier, high-tech, highly industrialized economies), (2) periphery (generally, but not always those that provide basic food stuffs and unprocessed raw materials to the richer countries), and (3) what is referred to the ‘semi-periphery’ (countries that have elements of both the core and the periphery, which tend to be ‘in the middle’ economically, so to speak). In each of these three zones of the global economy, labor tends to function in quite different ways in terms of wages and working conditions, technical pre-conditions (education of the work force), etc. In a similar light, many manufactured products today are not made in one place, but are the products of this global division of labor. Often one part of the manufacturing process begins in one zone, but the refining and final manufacture takes place somewhere else - making the process truly global. The global division of labor is made possible by increasingly cheap transportation costs and cheap sources of energy. Consequently, the course examines the processes of the global division of labor, how it seems to influence global production and its fundamental dynamism (but also instability), as production moves from one part of the world to another.
INTS 2180 Politics of Development (4 Credits)
This course seeks to answer an overarching question that plagues development studies: why are some countries poor while other countries are rich? Furthermore, we ask why poverty is persistent around the world, and how the economic, political, and social structures of a society can improve conditions of poverty within a country. We begin answering these questions by reviewing the history of development, especially development conceived since the 1950s, when the post-war world saw a need to rebuild societies in Europe, up to the present time, when human development became the focus in the decade following the end of the Cold War. The course covers the major documents promoting theories of development, as well as looks at the historical record of the implementation of development policies (noting the divergence between theory and practice). We consider specific case studies in the process of asking why some countries are poor and others are rich. Furthermore, we are concerned with the role of country policies and implementation practices, with the impact of international organizations (multilateral development organizations), and the influence of bilateral foreign aid, on development progress or decline within countries.

INTS 2235 Gender and International Relations (4 Credits)
The study of gender and international relations (IR) is multi-faceted and complex. Both in theory and in practice, gender inheres in all aspects of IR—from globalization, to development, to security and human rights. Conversely, the ideas and processes that comprise the international political realm directly impact the everyday lives of women and men all over the world. What is it like to be a woman in post-Taliban Afghanistan? Why is homosexuality taboo in Iran, but not in many other parts of the world? Did Soviet communism really promote gender equality? These are only a few of the questions that are addressed over the ten weeks of the course. After an introductory discussion of the broad implications of gender for international political issues and vice-versa, we embark upon a quest to unravel the ways in which gender identities and sexualities come to be defined and practiced in different times and places, while simultaneously considering how these same identities constitute the contexts in which they are situated. At each stop along the way, we will endeavor to discover the mechanisms through which gender and sexuality are constructed, and reflect critically upon what these diverse constructions mean for the lived realities of men and women in different parts of the world.

INTS 2270 Sustainable Energy (4 Credits)
This course examines the political and policy problems, national and international, involved in trying to create a sustainable energy system. The class begins by learning about how to think about energy as a system, how it is made up of interlinked technological, political, social, and economic components. After discussing what is unsustainable about the current system, the class delves into the challenges of changing the system to a more sustainable one. In addition to learning about some alternative energy technologies, the class studies how different countries, and international agreements, are trying to push the system into a new direction. This field is moving very rapidly. For that reason, students learn about diverse sources of information on energy and energy and energy policy, form mass media to think tank and government reports to more traditional journal articles and books.

INTS 2320 European Union (4 Credits)
Some observers argue that European economic integration is quickly leading to the creation of a European super-state for the first time in history. Using approaches from both international and comparative political economy, this course will examine the extent to which this is true. Four issue areas to explore are the introduction of a common currency (the Euro), trade, the welfare state and European Union enlargement. Throughout, the course will address whether changes in European economic arrangements in fact lead to cross-national harmonization, or whether the political consequences are rather new manifestations of national styles.

INTS 2370 Global Political Economy (4 Credits)
Provides theoretical discourse on the political and economic dynamics of markets and governments, the changing economic and political role of the US in the international arena and the post-Cold War trend towards globalization while focusing on the tension between national security and the global economy. Restriction: international studies and international business majors only.

INTS 2380 Comparative Development Strategies (4 Credits)
The course is comparative in nature, discussing the development of the First World in contrast to those development paths now being advocated for and implemented by the Third World. Are developing countries really constrained in the ability to implement the sorts of policies common in the First World during the late 18th and 19th centuries? What are the differences and similarities between First World development theory and practice, and Third World development theory and practice? What are the implications of these comparisons for development policy today?.

INTS 2430 History of the Middle East (4 Credits)
This course treats the emergence of the modern Middle East in the modern period, roughly from the late 18th century to the present and examines the following topics: reformist attempts to meet the European challenge; the age of colonialism; the rise of nationalism; development strategies of socialism and capitalism; the impact of Israeli and Palestinian nationalism; the petroleum factor; the Islamic revolution in Iran; Saddam Hussein's Iraq; the Gulf War and the war on terror. Prerequisites: must be an international studies major and have completed INTS 1500, INTS 1700 and INTS 2975.

INTS 2470 Crime & International Politics (4 Credits)
What constitutes a crime in one location may constitute a personal right, a survival strategy or legitimate business opportunity in another. So how then does one address criminality in a global society? This course explores the roots of transnational crime and both domestic and international response to criminal networks. Topics include corruption, the drug trade, and human trafficking.
INTS 2490 Introduction to Global Health (4 Credits)
This class is an introduction to the field of global health and explores relationships between social, political, cultural, and economic conditions of mostly low and middle-income countries and their impact on health and health services. We will spend some time covering health issues in high-income countries as well. A major focus of the course is the evolution of primary health care and alternative strategies in global health. Topics addressed include: maternal and child health, nutrition, the rise of non-communicable diseases, water and sanitation, community engagement, global health agencies, and funding sources. The course presents an overview of the multiple factors that influence global health and emphasizes the importance of a multidisciplinary approach to global health challenges.

INTS 2500 International Health and Development (4 Credits)
Health and development are held to be symbiotic in the production of economic and human well-being. However, the concept of health varies across context, institutions, geographies, and scale. This course will focus on the meaning, measurement, financing and delivery of ‘health care’ and the interaction of human well-being with other aspects of development. This course counts toward the Scientific Inquiry: Society and Culture requirement.

INTS 2700 Topics in Int’l Studies (4 Credits)
INTS 2701 Topics in Int’l Studies (4 Credits)
INTS 2702 Topics in Int’l Studies (4 Credits)
INTS 2703 Topics in Int’l Studies (4 Credits)
INTS 2704 Topics in Int’l Studies (4 Credits)
INTS 2708 Contemporary US Foreign Policy (4 Credits)
When the United States first won its independence, its leaders sought to avoid at all costs the countless problems awaiting any country engaging in foreign affairs. Indeed, John Quincy Adams, in 1821, warned the United States of the dangers of “going abroad in search of monsters to destroy.” In September of 2002, however, as American forces occupied one country and prepared to invade another, the Bush Administration released its National Security Strategy of the United States, which states: “To contend with uncertainty and to meet the many challenges we face, the United States will require bases and stations within and beyond Western Europe and Northeast Asia, as well as temporary access arrangements for long-distance deployment of U.S. forces.” How did we go from isolation to empire? In this course, we will attempt to answer this question by exploring the progression of American foreign policy from its emergence out of isolation to its current stage of interventionist superpower. We will also identify and discuss key issues that are driving America’s conduct abroad as well as evaluate the strengths and weaknesses of the given policies addressing these important issues. By the end of the class, students should have a solid knowledge of the major themes and developments in the history of American foreign policy as well as the ability to reflect critically upon on-going foreign policy debates.

INTS 2715 Introduction to Comparative Politics (4 Credits)
This course offers an introduction to the comparative study of political systems throughout the world. In the years following World War II, social scientists traveled extensively to newly decolonized regions of the world to examine societies there. Many found conditions so distinct from those of the western world that they warranted new models of political development. The distinguishing of development patterns in remote regions from those of western nations became the origin of modern comparative politics. The course considers both the impact of internal and external variables on political development. Internal or “domestic” variables include ideology, geography, economics and culture, while external variables include “globalization” and international conflict. Class includes understanding and critique of models of political development including classical liberal, authoritarian, communist, post-communist, “late” development, and social democratic models. It also includes discussion of possible new models in light of globalization and other factors.

INTS 2930 Latin American Culture, Politics and Society: A Contemporary Approach (4 Credits)
This course is dedicated to a search for the cultural and social continuity that can inform and transcend the economic and political disunity and fragmentation of the Latin American world. Despite the huge historical obstacles related to the long authoritarian traditions of the Pre-Colombian and Iberian Empires, a genuine rediscovery of cultural and social values can provide Latin America with the necessary economic and political convergence to implement successfully models of development related to its own cultural actuality.

INTS 2975 Global Issues Research Practicum (4 Credits)
Designed for mid-level international studies majors, this class aims to deepen students’ historical and contemporary knowledge of global relations and dynamics, refine understandings of important ideas and concepts, and further develop key skills integral to continued success in the Department and the field more generally. Specifically, students will learn foundational social science research methods and skills early in the quarter. Students will then apply these skills to a variety of projects in several topical areas. The course further focuses on a core set of skills necessary for continued student success in international relations: research, writing, presentation and inter-personal communication, and critical thinking. The course is organized around in-depth historical case studies, each of which exposes key events and processes in global history. The cases are also chosen to illuminate concepts, ideas, dynamics, and patterns in international relations that continue to surface in contemporary global affairs and debates, and have ongoing relevance looking forward into the 21st century. Prerequisites: INTS 1500 and INTS 1700.
INTS 2992 Directed Study (1-8 Credits)

INTS 3000 Research Methods & Design (4 Credits)
This course is designed for advanced International Studies majors, including Department Distinction, that intend to write a thesis in INTS. It introduces students to the fundamental elements of social science research and will serve as a workshop to complete a literature review and write a research proposal. The basis of any scientific investigation is the research proposal in which you formulate a question and design a process by which you will explore that question through a systematic collection and analysis of evidence. The design process is the same whether you are writing a short class research paper, or are conducting a major research project, such as a thesis. The manner in which evidence is gathered and analyzed, however, will vary based upon the research question, research goals, and resources. We will therefore go through the process of research design. Because international studies provides multiple methods of inquiry, we will also explore quantitative and qualitative methods that may be used to gather and analyze evidence. Prerequisites: INTS 1500 and INTS 1700. Must be an INTS major and receive departmental permission.

INTS 3014 Illicit Markets (4 Credits)
This course explores the relation between illicit networks, security and the state in the global economy. We study the links between what is considered formal and informal, and legal and illegal, in order to examine what official views obscure in everyday relations of transnational activities. The material largely examines illegal practices from the ground up from the perspectives of everyday civilians, communities, and those involved in extra-legal activities. We begin with a critical examination of the categories of "illegal," "illicit," "the state," and "corruption." We reveal these categories as cultural and political constructs rather than as pre-existent neutral categories of analysis. Some questions we ask are: Who applies these definitions? How have they changed and what interests do they serve? Are distinctions between "illegal" and "illicit" useful, or do they obscure the power of the state to determine legitimacy? Are some activities inherently illegal? Moreover, we explore the impacts of state security and militarization efforts on extra-legal networks and experiences of insecurity. Prerequisites: INTS 1500 and INTS 1700.

INTS 3015 Social Movements: Latin America and South Asia (4 Credits)
Latin America is the site of important movements to constitute new collective identities, deepen democracy, chart alternative patterns of development, and re-organize the international system. Some of the most important impulses for these efforts come from below, in the form of social movements that articulate the demands and the dreams of excluded populations. This course addresses major theories of social movements, including classical, structural, new social movement theories, as well as approaches to contentious politics. These theories have attempted to answer the fundamental questions of what triggers mobilization among excluded groups, how the overcome obstacles to stand up to oppression, what organizational strategies and tactics facilitate their action, and what changes they potentially trigger to basic rights, political institutions, and identities. The course also explores individual cases of social movements, approaching them as struggles against the oppression and exploitation that have faced Latin American people at different moments of history. Among the cases we’ll address are workers, peasants, indigenous, women, environmentalists, and advocates for democracy and human rights. We will also explore newly emerging and transnational movements, including those that articulate alternative models of globalization. The course takes an interdisciplinary approach, drawing on economics, sociology, anthropology, and political science. It places special emphasis on the political economy of popular organization, acknowledging the contested nature of development and the ongoing struggle for deeper democracies and more equitable societies. Prerequisites: INTS 1500 and INTS 1700.

INTS 3020 Introduction to Middle East and Islamic Politics (4 Credits)
The contemporary politics of the Middle East cannot be understood without some debate of the West's relationship with the region and the associated view of the Orient that grew out of this relationship. In light of this reality, the state system that has emerged in the region since the demise of colonialism forms a suitable framework in which to understand the major themes of this course. The first major theme to be discussed is the impact of colonialism on the region, particularly in the latter half of the nineteenth century and first half of the twentieth century. In this section of the course we explore the nature of political rule and government and the prevailing economic motive behind this imperial and colonial relationship. The second theme of this course explores political ideologies, both secular and religious. A historical overview of this development will be explored in the context of current theories of nationalism posited by authors such as Benedict Anderson, Eric Hobsbawm and Ernest Gellner. The final section of this course briefly explores the theme of democratization and its contents in the Middle East. The focus is on recent debates about democratization that have been promoted from outside the region as a means of combating tyranny within the region, particularly the perceived anti-democratic nature of political Islam. Prerequisites: INTS 1500 and INTS 1700.

INTS 3075 Security Research and Policy Analysis (4 Credits)
The objective of this course is to improve the skills that any security professional, be they in the academic and/or the policy communities, needs to successfully address complex national and international security questions. These skills include the ability to analyze and assess the work of others in the field critically, the ability to construct and execute the analysis and research necessary to address real world security questions, and the ability to articulate results, both in written and oral form, to a high professional standard. By developing an understanding of research method and design, students will have the foundational skills necessary to conduct security analysis. By both reading the work of others with a critical eye toward their method/design and seeking to use method/design to address real world security questions themselves, as well as being tasked to present the results of these efforts, students should complete the course in a much better position to both complete their short term academic goals and to participate in the security community after graduation. Prerequisites: INTS 1500 and INTS 1700.
INTS 3080 United States and the Middle East: Special Relationships (4 Credits)
The Middle East has been a focus of U.S. interests since the 19th century, from encounters with the Barbary pirates to the founding of major universities, such as the American University of Beirut. Until World War II, these interests were primarily private in nature, with little involvement by the governments of the countries involved. Private relationships, however, laid the groundwork for the strategic and economic alliances of the post-War period. U.S. involvement in the development of the Saudi oil industry, for example, went well beyond commercial bonds, as ARAMCO engineers, with U.S. government approval, constructed much of the Saudi infrastructure. The U.S. invasions of Afghanistan and Iraq have added two comparatively new, and extremely complex, relationships to the traditional ones. This class examines the nature of U.S. special relationships in the Middle East, with emphasis on five countries: pre- and post-revolutionary Iran, Saudi Arabia, Israel, Jordan, and Egypt. It then evaluates how these relationships continue to have an impact on regional affairs, particularly on Iraq and Afghanistan. During the course of the class, students should gain an overview of the historical record, as well as an appreciation of how the Middle East has served in the past as a crucible for the interplay of external interests. In addition, students should acquire a detailed knowledge of the studied countries, enabling them to present a paper and an oral presentation on likely outcomes in the Middle East over the next decade. Prerequisites: INTS 1500 and INTS 1700.

INTS 3120 Global Social Movements (4 Credits)
It is not only the economy that has become ‘global’ in the past 600 or so years. So have the social movements that spring out of the contradictions in the system. In some cases these social movements are the result of developments in one country (French, Russian Revolutions). But there is also a phenomenon of movements of a world-wide character that emerge more or less at the same time all over the world. These movements are not particularly new. One can cite the anti-slavery movements of the late 18th century and early 19th century and the anti-colonial movements of the 20th century as examples. More recently, there are a series of social movements that are global in character—the environmental movement, the peace (anti-nuclear, anti-war) movement, the movement to combat AIDS, and many human rights movements (Amnesty International, Human Rights Watch), which are international in character. Some of the interesting theoretical questions concerning social movements include the following: What are the factors in the global economy that trigger global social movements? What is ‘the social chemistry’ that results in the creation of a global social movement? Why is it that global social movements seem to have an almost organic quality about them (they are born, mature, grow old and often die)? How have the powers-that-be responded to global social movements across time (absorption, repression, etc.)? What determines the success, the failure of a global social movement? What seem to be the direction/characteristics of global social movements today? This course examines such questions and more. It explores a few ‘universal’ movements, either because they happened across the world at about the same time (revolution of 1848, 1968) or because, like the French or Russian Revolutions, they started in one place but spread because they were global in character. Prerequisites: INTS 1500 and INTS 1700.

INTS 3130 International Relations Theory (4 Credits)
This course examines the important classical, behavioral, and post-behavioral theories of international relations, and the nature of theory in international relations. Topics include the role normative theory; levels of analysis, structure-agent relationships, and concepts of foreign policy behavior and decision making; utopian/neoliberal and realist/neorealist theory, and democratic peace theory; theories of power and its management; theories of integration, cooperation, conflict, war, and geopolitical and ecological/environmental relationships; constructivism; systems theory; regime analysis; the relationship between theory and the international system in the early 21st century; traditional and contemporary paradigms of the international system. Prerequisites: INTS 1500 and INTS 1700.

INTS 3140 Russian Identity (4 Credits)
Russia, it has been said, is “a riddle wrapped in a mystery inside an enigma.” Embroiled in perpetual change and uncertainty, Russia has, for centuries, attempted to forge an identity that is uniquely its own. Through an exploration of literature, film, and select academic and political writings, we will endeavor in this course to unravel the complex and ever-changing dynamics of Russian identity, considering the implications of this constructed identity for both domestic and international political processes. Taking a historical approach, we will look in particular at the ways in which categories of analysis such as class, religion, gender, and ethnicity have played into constructions of the nation, and investigate the ways in which these constructions have been carefully resisted in both historical and contemporary contexts. Prerequisites: INTS 1500 and INTS 1700.

INTS 3171 Political Economy of the European Union (4 Credits)
Some observers argue that European economic integration is quickly leading to the creation of a European super-state for the first time in history. Using approaches from both international and comparative political economy, this course examines the extent to which this is true. To unpack the debate, we explore four issue areas, including the introduction of a common currency (the Euro); the Common Agricultural Policy and global trade; European Union enlargement; and the evolutions of a common defense policy. Throughout, the course addresses whether changes in the European economic arrangements in fact lead to cross-national harmonization, or whether the political consequences are rather new manifestations of national styles. Prerequisites: INTS 1500 and INTS 1700.

INTS 3210 Political Violence and its End (4 Credits)
This course centers on the nature, character, strategies and termination of the range of forms political violence -- violence used to achieve political ends be it by states, the international community, or non-state actors -- takes in the early 21st century. After a general discussion of the lexicon of security, force, war, and war termination, each of the five forms of political violence are explored beginning with a discussion of the fundamentals, an exploration of the current context and character of the form centering on a leading book on the subject, and then a discussion of counter-strategies and broader political/societal considerations. The course ends with a similar three part discussion of the political/military realities and necessities of violence termination. Prerequisites: INTS 1500 and INTS 1700.
INTS 3245 Population, Politics and Development (4 Credits)
This course examines past and future global population trends, with an eye on the theories, techniques and abuses of limiting population growth beginning with the early 20th Century Eugenics movement and the Birth Control movement of the same period, looking at its evolution in the post-World War II period. In the post-WW II period, we look at the factors leading to the postwar population explosion, finishing off with current and future trends. Throughout the course, we explore how population theories have been connected to economic development and GNP, and how it has affected, or tried to affect, global demographic patterns. Along the way, we study the Eugenics movement in the U.S. and Nazi Germany, the post-war attempts at birth control as a result of new technologies and some of the more famous studies: post-World War II sterilization campaigns in Puerto Rico, the birth control movements in China and India, and recent cases of sterilization abuse (Native Americans in the 1870s, Peru under Fugimori). We end by looking at the different predictions for population growth in the coming decades. Prerequisites: INTS 1500 and INTS 1700.

INTS 3310 Disasters, Hazards & Response (4 Credits)
While we have substantial literature on how countries and communities respond to internal natural and manmade disasters, we know much less about international response. Through concentration on a number of important catastrophes, students focus on the variables that explain how and why the international community responds to disaster with both vigor and, in some cases, little interest. Prerequisites: INTS 1500 and INTS 1700.

INTS 3385 Migrants and Refugees: Humanity on the Move (4 Credits)
This course begins with the pre-history and history of human migrations and moves to cover the era of European colonization and forced dispersal (and in some cases aggregation) of peoples in the Americas, Southeast Asia, and Africa. The "contemporary" (i.e., post-WWII) era then covers not only the movements of peoples from Central Africa, Southeast Asia, the Balkans, and elsewhere, but will highlight the achievements of immigrants and refugees in such areas as technology, the arts, and the field of human rights. Issues of ethnicity, nationalism, and political diasporas will bring the contemporary era to a close. Prerequisites: INTS 1500 and INTS 1700.

INTS 3390 Gender and Development (4 Credits)
This course looks at issues of international development from the dual perspectives of gender analysis and cultural anthropology. While it is heavily based on political economy and assumptions about dependency and underdevelopment, it takes a strong micro-level, case study approach as well. That is to say, while we are concerned about policy issues, we expand our analysis to the women and their families whose day-to-day existence is at the heart of the topics. Finally, we engage in gender training workshops to learn lessons of facilitation and participatory change in grassroots development. Prerequisites: INTS 1500 and INTS 1700.

INTS 3485 The Role of Religion in International Affairs (4 Credits)
The role of religion in international affairs was largely unexplored by scholars prior to September 11, 2001 when religiously based acts of terrorism shook the world. Since that time there has been an increased interest in examining religion in terms of its' impact on the international system. Is religion a force for good or evil within the international system? How influential is religion in international politics? Does religion matter or is it merely background noise in our study of the international system? In short, this course examines the role of religion in international affairs with an eye toward understanding political violence, political economy and conflict resolution in terms of religion and religious actors. Prerequisites: INTS 1500 and INTS 1700.

INTS 3520 Environment, Security and Conflict (4 Credits)
This class examines the intersection between the environment and security, and the ways in which “green” issues can lead to international conflict, either as underlying causes or as catalysts. The class looks at a variety of broadly defined environmental factors, including competition for scarce resources and environmental degradation that occur both naturally (e.g., desertification) and by the hand of man (e.g., the contamination of soil because of munitions, land mines, etc.). It considers the potential for weather modification as both a means of cooperation and as a military tool. We pay particular attention to an overriding environmental concern: water and its ownership, management and use. A continual determinant of internal and external policy, water has the potential for becoming either a fundamental political weapon or a means for cooperation that could provide a basis for wide-ranging regional stability. Additional, we look at the significance of oil as a natural resource and as a security issue, regionally and internationally. Prerequisites: INTS 1500 and INTS 1700.

INTS 3530 Feeding the World: The Politics and Economics of World Food and Agriculture (4 Credits)
This course asks students to critically explore contemporary debates about the global food and farming system with an eye to understanding its structure, operation, ideological basis, and impacts on people around the world. Of special interest in the course is the manner in which the global food and farming system both creates and aggravates global inequalities. Students focus partly on theories of and ideas about the role of agriculture in the economy, society and the development process, the appropriate structure and orientation of agricultural production and distribution, the role of the state in directing food production and distribution, and the nature of justice for farmers and eaters. Students further engage a spectrum policy debates and case studies that particularly illustrate the workings of the global food and farming system and the harsh contradictions that underpin it. Among other topics, students are exposed to debates about food prices, hunger and famine, obesity, commercial production and agribusiness, the peasantry and subsistence farming, biotechnology, free agricultural trade, fair trade, agricultural pollution and agriculturally-induced climate change. Prerequisites: INTS 1500 and INTS 1700.

INTS 3540 Contemporary China (4 Credits)
This course provides an overview of the rise of China and its likely future course, focusing on five essential components: (i) the Legacy of the Past in which we examine the legacies from the Imperial, warlord, Guomindang and Maoist traditions; (ii) the Chinese Economic Boom, which examines the massive, and even unprecedented, Chinese economic boom unleashed by Deng Xiamping's Four Modernizations in 1978; (iii) Chinese Politics: Democracy, Nationalism, and Foreign Policy, in which we cover the People's Republic of China's path toward great power status, which differs dramatically from the path followed by the West. In this section we look at issues of democracy, nationalism, and foreign policy as crucial to understanding China today; (iv) Chinese Culture Today, explores the rapid modernization of Chinese culture in the last two decades, with emphasis on pop culture, commercial culture and movies; and (v) Rural China, in which we consider the lives and the future of the majority of the Chinese population that still lives in the countryside but is undergoing massive transformation. Prerequisites: INTS 1500 and INTS 1700.
INTS 3560 Globalization and International Security (4 Credits)
Globalization moved a long time ago from social science to omnipresent buzz word, but with increased usage has not always come increased understanding. Globalization is the increased participation, and consciousness of that participation, by individuals in global, that is to say trans-regional or transnational, networks. Today's globalization is made possible in large part by dramatic and continuing changes in technology, but its impacts are social, economic, political, and potentially military changes in perception, in scale, in magnitude, and in threat. This course specifically concentrates at the intersection of global networks, the technology that makes them possible today and tomorrow, and current political and military security challenges to include national and internal state security, global terrorism, global insurgency, and cyber warfare. Prerequisites: INTS 1500 and INTS 1700.

INTS 3565 The Human Dimensions of Globalization (4 Credits)
This course explores the effects of neoliberal globalization on the lives of individuals and their communities. In an increasingly interconnected world, how do everyday people and communities negotiate the opportunities, dislocation, and/or disjunctures engendered by neoliberal globalization? Does globalization contribute to increasing global homogeneity or does it restructure difference and inequality in new ways? We explore how a ground-up view of globalization can highlight some of its contradictory effects. We discuss how globalization influences increasing inequality, restructures individual and group identities, as well as the relation between globalization and migration. From a ground-up perspective, we attune to growing global connections to understand how transnational commodity circuits intersect with individual lives and communities. We ask: How are commodity chains also cultural objects that shape, and are shaped by, how we see the world? Moreover, we pay attention to the development of grassroots networks and social movements that forge connections across borders to channel and/or challenge the current trajectory of globalization. We also find it imperative to understand the affective dimension-how do human beings think about their emotional relationships, families, and identities in relation to changing global dynamics? A central question we ask is: As everyday life becomes increasingly commoditized, how do people cope, find support and value, and reveal alternative ways of conceptualizing how we can all connect to one another? Prerequisites: INTS 1500 and INTS 1700.

INTS 3575 Agriculture & Rural Development (4 Credits)
This course addresses major political, economic, environmental, and social aspects of agriculture and rural development in low- and middle-income countries. This includes the analysis of national agriculture and food policies, as well as systems of food production, consumption, and marketing at the local, national, and international levels. We will examine the nature of food markets and the operation of agricultural commodity and factor markets and assess agriculture's contribution to economic growth, employment, and the improvement of welfare in regions with widespread rural poverty. The central role of environmental sustainability for agricultural development will be addressed from local and global perspectives, with particular focus on the complex interactions between international goals for sustainable development, agricultural modernization strategies of low- and middle-income countries, and the social and economic development prospects of small farmers and agricultural wage workers. Using a broad range of country case studies, we will use mainstream and heterodox approaches to analyze structural change in largely agriculture-based societies and those with large rural populations. The course will enable students to understand global trends or rural development and agrarian change and assess agriculture policy in low-and middle-income countries. Prerequisites: INTS 1500 and INTS 1700.

INTS 3590 Politics in Africa: A Theoretical Approach with a Comparative Perspective (4 Credits)
This course introduces students to basic concepts and arguments in the study of contemporary African politics. The focus is on the politics in Africa post-independence. The course emphasizes theory in a comparative perspective as a way to understand politics in Africa. The basic question is whether politics differ so much in Africa as to be in a category by itself or is it simply a variation on patterns, habits, and institutions found in other regions and countries in the world? The course goal is to provide students with important concepts so as to gain a better understanding of processes in Africa and the problems that in some fashion or other account for the continent's current marginality in the world and persistent underdevelopment. In addition, the course exposes students to the application and usefulness of general theories of development in comparative politics. Prerequisites: INTS 1500 and INTS 1700.

INTS 3600 International Monetary Relations (4 Credits)
We investigate the operation and evolution of today's international monetary system; the course will investigate both the politics and economics of international monetary negotiations, and will examine several key public policy debates that concern governments and investors around the world. The course will be an introduction to these timely and important issues, and will be organized around lecture, class debates, and discussion. Prerequisites: ECON 1020, INTS 1500 and INTS 1700.

INTS 3621 Comparative Democracies in Western Europe (4 Credits)
This course is a comparative study of democratic governments in Western Europe and how these polities are structured and function, particularly with regard to the regulation of conflict. Democracy is the institutionalization of conflict, but democratic regimes vary with regard to the ways that they structure the arenas within which conflict is expressed. Presidential vs. parliamentary systems, as well as fragmented multi-party systems vs. majoritarian two-party systems, for example, are extremely important distinctions that have important consequences for the nature of politics within a society. So, too, are the nature of political parties and the dynamics of party systems and the shape and structure of the public opinion and major political attitudes. The study of Western Democratic polities, however, requires some retrospective historical analysis of the nature of the conflicts emerging since the creation of the Modern States. Many of the present conflicts in Contemporary Democratic Regimes are still legacies from the long lasting and conflictual emergence of the contemporary States. We also spend some time in analyzing retrospectively. Prerequisites: INTS 1500 and INTS 1700.
INTS 3630 Global Environment (4 Credits)
The linkages between social change, economic change and alterations to ecosystems have been apparent, if not overtly acknowledged, throughout history. It was not until 1987, however, with the publication of Our Common Future, that such linkages were couched in terms of development and explicitly placed on the international development agenda. The idea appears simple—environmental change, patterns of social change and economic development, social and political factors operate together and impact local, national, regional and global ecosystems. But impacts of the change in any one sector are seldom confined within national boundaries. How then does one address environmental issues across different regulatory, political, institutional and geographic scales? This course examines the connectivity between diverse elements of our planet's ecosystem, explores how a change in one element can have immediate and long-term impacts across local and global territory, and looks at strategies to create greater harmony across environmental, social, political and economic interests. Prerequisites: INTS 1500 and INTS 1700.

INTS 3660 States in Transition and European Integration (4 Credits)
This course examines states in transition in Europe and on its periphery. The central question the course asks is why, looking across the post-communist world, many states have joined the European Union and also the North Atlantic Treaty Organizations, while many others have held on to authoritarian means or rule or have been party to armed conflict. While Poland, the Czech Republic, Slovakia and the Baltic States have acclimated themselves to many European Union rules relatively smoothly, Hungary has become the least democratic state in the Union. At the same time, Georgia, Ukraine and Russia are embroiled in protracted and in some ways interrelated conflicts, with democratic consolidation either seriously compromised or not even on the agenda. This course examines these diverging trends, drawing on a range of international relations and comparative politics approaches to explain highly variable outcomes across the region. Prerequisites: INTS 1500 and INTS 1700.

INTS 3670 Sustainable Development and Tourism (4 Credits)
In 2006, a record 846 million tourists travelled internationally spending US $733 billion in their travels. This course explores the motivation behind developing the tourism industry, especially in low and middle income regions, and examines the diverse outcomes of the same. The central question we address is whether or not tourism is a viable means of creating and sustaining improvements in the quality of life for host communities. Case studies include eco-tourism, island tourism, medical tourism, and sex tourism. Prerequisites: INTS 1500 and INTS 1700.

INTS 3692 Conflict Resolution (4 Credits)
Ending conflict is one of the great dreams and great challenges facing the global community today. This course examines approaches to mitigating and ending inter- and intra-state conflict. This course looks at the short and long term diplomatic and military strategies used to end conflict, and then explores the social, economic, and psychological tools available not only to end hostilities, but to build lasting peace. Prerequisites: INTS 1500 and INTS 1700.

INTS 3701 Topics in Int'l Studies (1-4 Credits)
Prerequisites: INTS 1500 and INTS 1700.

INTS 3702 Topics in Int'l Studies (1-4 Credits)
Prerequisites: INTS 1500 and INTS 1700.

INTS 3703 Topics in Int'l Studies (1-4 Credits)
Prerequisites: INTS 1500 and INTS 1700.

INTS 3705 Topics in Int'l Studies (1-4 Credits)
Prerequisites: INTS 1500 and INTS 1700.

INTS 3708 Topics in Int'l Studies (1-4 Credits)
Prerequisites: INTS 1500 and INTS 1700.

INTS 3731 Comparative Health Care Policy (4 Credits)
Regardless of who we are, where we live, and what we believe, we are all born, we all age, and at various points in time, we all get sick thus making health a universal concern and a universal human right. While our concern about health may be universal, the experience of sickness and health is not. The reality of limited human and fiscal resources for health care provision creates a diverse landscape of choice and outcomes. Globally, nations are confronting a health care crisis as policy makers consider trade-offs between differing paradigms of public responsibility and resource allocation. A central concern for public policy is thus, “At what cost, health?” It is with this in mind that we explore dominant models of health care financing and delivery. We first look at the ethical, philosophical, and economic questions that underpin public healthcare policy. We then explore the specific models of health care financing and delivery currently used in the United States. Next, we compare the principles and mechanisms of health care in the U.S. to those in the United Kingdom. We conclude by examining pluralistic health care (and change) in the context of resource-poor nations. Prerequisites: INTS 1500 and INTS 1700.

INTS 3762 Contemporary Russia (4 Credits)
This course will offer an understanding of the politics, economics and society in transition in contemporary Russia. A review of the Soviet past is incorporated, but it will concentrate mainly on understanding the dynamics of the post-Soviet era. Prerequisites: INTS 1500 and INTS 1700.
INTS 3775 Introduction to International Law (4 Credits)
This course is an introduction to the basic principles and structures of international law, the history and development of the international legal system, the sources of international law, the interplay between the laws of nation-states and international legal principles, the roles play by multistate organizations, including the United Nations, regional customs unions and non-state actors such as non-governmental organizations and multinational corporations. This course will map out rules and methods of international legal agreement, treaty and contract interpretation and dispute resolution and the principles of state immunity and responsibility. Finally, this course will focus on the major areas in which international law is made and relied upon, and disputed, including criminal proceedings, international trade and commerce, international human rights, environmental policy, and this use of force. Prerequisites: INTS 1500 and INTS 1700.

INTS 3780 The Ethical Foundations of the Global Economy (4 Credits)
This course explores the ethics that underlie the most pressing debates today in global economic policymaking. Most people know that economists typically endorse the policy of "free trade," or the outcome of "economic growth." Indeed, economists advocate these so often that it seems self-evident that these are obviously desirable. But why is this so? What is the ethical grounding for the economist's stance on these matters? Unfortunately, economists themselves don't often explore the ethical foundations that underlie their policy perspectives. They typically write as if these foundations are obviously correct and beyond doubt. But in fact, the ethical foundations of economics are hotly contested—both within economics and in philosophy and other disciplines. This course is intended to help students make ethical sense of contemporary global economic policy debates. To that end, we move back and forth between abstract theoretical debates (in economics and philosophy) and concrete, applied policy matters. For instance, we examine the current debate over "free trade" versus "fair trade." We see why most advocates for labor, women's and human rights and most environmentalists favor fair trade, and why most neoclassical economists reject these claims and instead advocate free trade. Prerequisites: INTS 1500 and INTS 1700.

INTS 3820 United Nations (4 Credits)
This course provides an introduction to the United Nations and related agencies and programs. It examines the background and institutional arrangements of the UN System but gives special attention to the activities of the UN designed to advance peace and security. Case studies of UN responses to recent crises in Asia, Africa, Europe and the Western Hemisphere will be included. Prerequisites: INTS 1500 and INTS 1700.

INTS 3850 Foreign Aid, Debt and Development (4 Credits)
This course analyzes third world debt relief including the role of major powers, the World Bank and IMF in creating debt and the relationship between debt relief and poverty alleviation. The effects of debt relief upon globalization issues are also covered. Prerequisites: INTS 1500 and INTS 1700.

INTS 3900 Global Humanitarianism (4 Credits)
The purpose of this course is four-fold: (1) to provide an overview of the diverse array of events (both human-caused and natural) that trigger humanitarian responses; (2) to detail the methods used by first- and second-responders, as well as other humanitarians, as they deal with disasters; (3) to detail the methods used by human service professionals as they assist migrants and refugees; and (4) to present the theories and premises essential to social science's analyses of global humanitarianism. Therefore, extremely well-known "bellwether events" such as the 2001 attacks on New York, the 2004 Southeast Asian tsunami and 2005's Hurricane Katrina are covered in depth. Less well-known events, such as New York's "triangle fire," the Bhopal gas explosion and the Longmont, Colorado airliner bombing are also considered. Events associated with warfare, especially the forcible displacement of refugees, are essential. Class lectures and readings are grounded in understandings of human rights, community development and social service. Humanitarian intervention (that is, civil-military cooperation in relief) is considered in places as diverse as East Timor and Romania. Another key to the course is the discussion of "practitioner profiles," i.e., the careers of humanitarians working in various settings worldwide, and the discussion of "institutional profiles," i.e., the operations of organizations such as the Red Cross and FEMA. Overseas case studies (Bosnia, Sudan, Ethiopia, El Salvador, Indonesia and the U.S.) are also used. Prerequisites: INTS 1500 and INTS 1700.

INTS 3952 Human Rights in the Global World (4 Credits)
This course will examine the nature, utility and effectiveness of international efforts to define, promote and protect human rights. Particular attention will be given to activities of the United Nations and related programs and agencies. The roles of governments, regional intergovernmental organizations and nongovernmental organizations will also be explored. Prerequisites: INTS 1500 and INTS 1700.

INTS 3980 Internships in International Studies (0-4 Credits)
Experience is an important asset when applying for any job. As you will find after graduation, the job market is incredibly competitive, and becoming more so. Gaining real world experience during college will make you a much stronger candidate when seeking that first position after graduation. Through INTS 3980, you have the opportunity to earn between 0 and 5 quarter credit hours for internships of 100 hours or more. The internship portfolio facilitates a student's academic, professional, and personal growth by providing documentation and representation of the internship experience. Elements of the portfolio will help bridge academic experience with career possibilities, and provides an opportunity for self-reflection through your experience. Analysis of your internship will help identify areas of success and points where you could improve overall. The objective of all aspects is to enable you to be more competitive in a global job market. Internships require departmental approval and must be undertaken during the quarter in which you register for credit. The BA program in INTS will not award credit retroactively for internships completed prior to the quarter in which students are registered. Prerequisites: Must be an INTS major and receive departmental permission.

INTS 3990 Thesis (4 Credits)
The thesis project is an original contribution to the understanding of issues relevant to international studies and to at least one of the concentration areas in international studies. The thesis must feature original research; that is, it must critically investigate a theoretically informed hypothesis, using sources to support an evaluation of the research question. The thesis must show clearly the following elements: excellent critical thinking and writing quality, coherent presentation, and adherence to the general guidelines set forth by the faculty advisor. Prerequisites: Must be an INTS major and receive departmental permission.
INTS 3991 Independent Study (1-8 Credits)
In-depth study of a particular issue under the guidance of a professor. Prerequisite: prior agreement with department and permission from registrar.

INTS 3992 Directed Study (1-8 Credits)

Judaic Studies

Office: Sturm Hall, Suite 157
Mail Code: 2000 E. Asbury Avenue, Denver CO 80208
Phone: 303-871-3020
Email: cjs@du.edu
Web Site: http://www.du.edu/ahss/cjs

The Center for Judaic Studies (http://www.du.edu/ahss/cjs) (CJS) is a vibrant source of in-depth Jewish learning on campus and across Colorado. Our faculty are research and teaching experts in a wide range of interdisciplinary areas of Judaic Studies. Their work is internationally recognized, and they offer an impressive annual lineup of undergraduate and graduate courses in fields of Jewish history, religion, language, literature, philosophy, film, and culture.

In addition to being home to our own faculty experts (http://www.du.edu/ahss/cjs/facultystaff), CJS hosts annual visiting scholars, performing artists, authors, poets and filmmakers from around the world.

We offer a minor in Judaic studies, and a number of joint MA and PhD degrees with programs across campus. We are home to the Holocaust Awareness Institute, the Holocaust Memorial Social Action Site and The Rocky Mountain Jewish Historical Society. We also serve the broader community through many annual events and co-sponsored activities across Colorado.

The Judaic Studies program combines courses in Judaic studies (JUST), English (ENGL), Hebrew (HEBR), History (HIST), Philosophy (PHIL) and Religious Studies (RLGS) to give students a well-rounded perspective on Jewish culture, thought and history.

Judaic Studies

Minor Requirements

There are two core requirements to complete the Judaic studies minor:

1. Students must demonstrate proficiency in the Hebrew language equivalent to one year (HEBR 1001, HEBR 1002, HEBR 1003).
2. Students must complete at least 20 credits of approved Judaic studies courses. Sixteen of those credits must be at the 2000 level or above.

The Judaic studies program combines courses from several disciplines and departments. We encourage you to combine courses that reflect the interdisciplinary nature of our program, choosing from the various departments represented by our faculty.

Students may also choose a minor in Judaic studies with an emphasis in Hebrew. For this option, students complete the minor requirements listed above by taking HEBR 2001, HEBR 2002, and HEBR 2003 toward their additional 20 credits of approved Judaic Studies courses. (*Note: While HEBR 2001, HEBR 2002 and HEBR 2003 are not JUST cross-listed, they count as approved Judaic Studies courses).

Since the Judaic Studies minor includes Hebrew study, CJS works in partnership with the Department of Languages & Literatures at DU where the Hebrew program is housed. For more information about the Hebrew program, please see the Languages and Literatures Department (p. 237).

Hebrew Courses

HEBR 1001 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 1002 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 1003 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 2001 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.

HEBR 2002 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.
HEBR 2003 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.

HEBR 2745 Israeli Television and Cinema: Representing Cultural Diversity in Israeli Life (4 Credits)
The course goals are three-fold: a) to facilitate students' communicative competence in Hebrew across the interpretive, interpersonal and presentational modes through constant immersion in Hebrew, b) to expand students' knowledge and understanding of Israeli society and culture while interacting solely in Hebrew, and c) to help students develop a lifelong interest in learning the Hebrew language and its culture. Screening of Israeli films is a central part of the course. All the films are in Hebrew. The course is not open to native speakers of Hebrew. Cross listed with JUST 2745. Prerequisite: HEBR 2003 or equivalent.

HEBR 3010 Aspects of Modern Hebrew: Readings, Films, Songs, and Discussion (4 Credits)
This course is designed for students who have successfully completed Intermediate Hebrew. It facilitates communicative competence in Hebrew across interpretive, interpersonal and presentational modes through constant immersion in Hebrew. It also expands knowledge of Israeli culture while interacting solely in Hebrew. This course is not open to native speakers of Hebrew. Cross listed with JUST 3010. Prerequisite: HEBR/JUST 2003.

HEBR 3701 Hebrew Readings (1-4 Credits)
Selected authors or genres in Hebrew literature. Prerequisite: JUST/HEBR 2003 or equivalent, or instructor's permission.

HEBR 3991 Independent Study (1-5 Credits)

HEBR 3992 Directed Study (1-4 Credits)

Judaic Studies Courses

JUST 1600 Jews in the Islamic World, 632 C.E. - 1948 C.E. (4 Credits)
This course deals with Jewish history in the Islamic world from the death of Muhammad to the establishment of the state of Israel. Students are exposed to the political, social, and economic histories of various Jewish communities, many of which no longer exist, in numerous Islamic empires and/or political units. While studying these communities we also compare the treatment of Jews under Islamic rule to the treatment of Jews under Christian rule and the treatment of Christians under Islamic rule. Cross listed with HIST 1600. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JUST 1610 The History of the Crusades: 1095-1300 (4 Credits)
This course traces the origins and development of the Crusading movement as well as its impact on Christian, Muslim, and Jewish society in Europe and the Middle East from the 11th through the 14th centuries C.E. This course also examines ideas of Christian/Muslim/Jewish difference in this period. We pay special attention to primary source material. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with HIST 1610.

JUST 2014 Religious Existentialism: Christian and Jewish (4 Credits)
Existentialism focuses on the human experience of living, often with a focus on the sheer freedom of the human condition. Religious existentialism subtly modifies this picture through its own vision of human freedom as the ultimate encounter between the human subject and God (with 'God' understood in various ways). The religious existentialist in this sense philosophically explores that which is most-fully-human as a moment of relation and encounter between self and that which is beyond self. Starting with Sartre's non-religious statement of existentialism in Existentialism is a Humanism (1946), we go on to examine the Christian and Jewish existentialists of Kierkegaard (1813-1855), Tillich (1886-1965), Buber (1878-1965), and Heschel (1907-1972). In the course of our reflections, we compare non-religious with religious approaches to basic questions about self, God and world, and we consider the relationship between Christian and Jewish existentialist approaches to these questions. This course counts toward the Analytical Inquiry: Society and Culture requirement.Cross-listed with PHIL 2014 and RLGS 2014.

JUST 2030 Spaces of Memory: Texts and Contexts of Argentina's Dirty War (4 Credits)
From 1976-1983, the Argentine military government engaged in a campaign of terror against its citizens, some of whom were suspected of dissidence and subversion while many others were considered a threat "by association" to the stability of the regime. It is estimated that during the seven years of this "Dirty War" some 30,000 civilians were "disappeared," abducted by the government and sent to secret spaces where they were detained, tortured, and eventually killed. This course, taught in Buenos Aires, explores the construction of memory in both texts and physical spaces touched by the violence, repression and disappearance in Argentina. It will further examine anti-Semitism during the military dictatorship. While at the time of the military Junta, the Jewish population of Argentina was estimated at just over 1% and it accounted for an estimated 10% of those who disappeared during the "Dirty War." The report of the National Commission of the Disappeared (CONADEP) attests to a particular brutality in the treatment of prisoners of Jewish origin, as Jews were not only tortured, but the torture they were subjected to often took on an anti-Semitic form. We will also examine the role of memory in reconstructing discourses; testimonial literature and the modern and postmodern views of representation; narratives of exile and dispersion; and points of convergence between this literature and other survivor testimonial narratives, particularly those of the Shoah. We will have the opportunity to meet with writers and activists whose work is informed by the atrocities of the "Dirty War," and visit the Organization of the Mothers of the Plaza de Mayo, and public spaces of memory, such as the Parque de la Memoria, the ESMA, the AMIA building, the Baldosas, etc.

JUST 2040 Israel Between Wars: History and Society (4 Credits)
Through historical sources, documentaries, movies and scholarly research, this course examines the major wars and clashes between Israel and its neighbors in the years 1948 to 2011. In this way, we examine in depth the complexities of Israel's relationship with their Arab neighbor states with a particular focus on the details of the Israeli-Palestinian conflict. This course counts toward the Analytical Inquiry: Society and Culture requirement.
JUST 2050 Jewish Philosophy (4 Credits)
This course sets out to explore the self and the sacred in Jewish tradition by exploring the nature of faith and reason, the call to ethical response, and the meaning of divine revelation in multiple Jewish philosophical voices across the ages, including Philo, Saadya, Halevi, Maimonides, Solovetchik, Buber, Rosenzweig, and Levinas. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with PHIL 2050.

JUST 2104 The Bible as Literature (4 Credits)
The Bible has been one of the most important works in all of Western society. In this course we read the Bible as a masterpiece of literature. Rather than focusing on theological questions about this work as inspired scripture, we instead focus on its rich literary qualities and explore some ways in which these stories have influenced modern society. Reading select passages, we discuss its literary genres, forms, symbols and motifs, many of which are important in literature today. Of the latter, we encounter stories of creation and hero tales, parables, apocalyptic literature, and themes of paradise and the loss of Eden, wilderness, covenant, and the promised land. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ENGL 2104 and RLGS 2104.

JUST 2107 Culture and Conscience in Vienna (4 Credits)
This course focuses on the cultural and social history of the city of Vienna as the hub of politics, cultural, and religion for Central Europe with special attention to its religious heritage as the seedbed for its rich cultural traditions. The course examines how the city’s religious heritage, particularly Judaism, shaped its rich cultural heritage and the birth of modernism. A special segment of the course is devoted to the Nazi period and the Holocaust, including a study of the resistance of religious groups. The course concludes with a history of the post-Nazi period with attention to the development of Vienna as the hub of international social justice projects. The class is taught in seminar format and combines lectures with site visits to major cultural and historical sites around the city. The course consists of a weekly colloquium that discusses in a moderated format the implications, religious, social and cultural issues, and common experiences of students engaged in international service learning as part of a faculty-led international service learning quarter-long program in Vienna, Austria. Cross listed with HIST 2107, RLGS 2107.

JUST 2201 Introduction to the Hebrew Bible (4 Credits)
The legacy of the Hebrew Bible has been great for both Western and world culture. In this course, we read the books of the Hebrew Bible critically as literature, as religious text and as a source of sociological knowledge. The students gain a general overview of the narrative and historical development of the text while simultaneously being introduced to the various modes of biblical interpretation. Emphasis is placed on situating the literature and religious expression of the Bible within its ancient Near Eastern milieu. Cross listed with RLGS 2201.

JUST 2202 New Testament (4 Credits)
This course takes a multifaceted approach (historical, literary, and critical) to the writings that comprise the Christian New Testament. The New Testament are read as a collection of primary documents that chronicle the primitive Church’s slow and often painful process of self-definition. In these writings it is possible to discern the tension that arose because of the strong religious and cultural ties early Christianity maintained with Palestinian Judaism, from which it emerged as a sectarian or reform movement. The careful reader also finds evidence of the new religion’s encounter with the Greco-Roman world from whose variegated ethos and culture it borrowed considerably on the way to becoming an important religious force in the first century. In exploring the New Testament, then, we attempt to recover something of the sense of what it meant to be a Christian in New Testament times. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2202.

JUST 2242 American Jewish History (4 Credits)
This course will explore how the American Jewish experience developed and changed over time, from the colonial period to modern times. It will begin with the first group of Jews who arrived in 1654 in what is now New York and focus on successive waves of immigration, continuing through World War II, and the post-war period. We will explore the varied ways in which the immigrants and subsequent generations constructed their American Jewish identities, as well as such pivotal issues as acculturation, assimilation, and ethnic tensions. One of the major goals of the course is to encourage clear and effective writing, as well as to expose students to primary and secondary sources and offer tools to help evaluate evidence. Primary source materials relevant to each unit will be analyzed and reviewed at each class session. Cross listed with HIST 2242.

JUST 2245 History of the Modern Jewish Experience (4 Credits)
Concepts, documents, movements and practices of modern Jewish history. Cross listed with HIST 2245.

JUST 2300 The Arab-Israeli Conflict: 1881-2000 (4 Credits)
This course aims to introduce students to the political, social, and cultural history of the Arab-Israeli conflict from the initial Jewish migration to Palestine in the 1880s through the Oslo Accords. Cross listed with HIST 2300.

JUST 2310 The Modern Middle East: 1798-1991 (4 Credits)
This course traces the history and development of the modern Middle East from Napoleon's invasion of Egypt in 1798 through the First Gulf War in 1991. We pay special attention to the impact of colonialism and Great Power diplomacy on the region. Cross listed with HIST 2310.

JUST 2320 US Foreign Policy in the Middle East (4 Credits)
This course aims to introduce students to both Middle Eastern history and American Foreign Policy by exploring the politics and culture of U.S. involvement in the Middle East in the post-WWII period. In doing so this course pays special attention to the impact of the Cold War in the Middle East, American policy towards the Arab-Israeli conflict, the role of oil in American foreign policy, American responses to the rise of Islamist movements, the impact of media and culture on the formulation of America’s Middle Eastern policies, and U.S. relations with dictatorial governments in the Middle East. Cross listed with HIST 2320.

JUST 2350 Israeli Culture Through Film: Society, Ethnicity, and Inter-Cultural Discourse (4 Credits)
This course presents Israeli society and culture development as reflected in Israeli films from the 1950s to present day Israel. Topics include history and collective memory, ethnicities and the experiences of immigration, Israelis in their spatial Mediterranean/Middle-Eastern context and Judaism in its old and new representations. This course counts toward the Analytical Inquiry: Society and Culture requirement.
JUST 2360 Israeli Society Through Film: Narratives of the Holocaust, War and Terror in Israeli Life (4 Credits)
This course analyzes fundamental aspects of Israeli-Jewish collective identity through a consideration of the trauma of the Holocaust, and explores the representation of these issues in Israeli film from the 1960s to today. The course presents and analyzes narratives of human experience in traumatic times and their after-effects via cinematic perceptions of Holocaust survivors and their offspring, the relationship between the Israeli native Sabra and the Holocaust survivor, the impact of war on soldiers and their families, and the Israeli experience of terror. Screenings of Israeli film is a central part of the course. All films are in Hebrew with English subtitles. This course counts toward the Analytical Inquiry: Society and Culture requirement. No prerequisites.

JUST 2410 Religious Diversity in Israel (4 Credits)
Through religious, sociological and historical sources, as well as documentaries, movies and scholarly readings, this course examines religious diversity in Israel since its establishment in 1948 to current events today. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2410.

JUST 2700 Topics in Judaic Studies (1-5 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 2701 Topics in Judaic Studies (1-5 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 2702 Topics in Judaic Studies (1-5 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 2704 Topics in Judaic Studies (4 Credits)
Topics vary, reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 2741 American Jewish Literature (4 Credits)
This course surveys over 100 years of American Jewish immigrant narratives beginning with the great exodus of Eastern European and Russian Jewry at the end of the 19th century and ending with recent arrivals from Israel and the former U.S.S.R. Canonical works by central authors reveal the great successes of Jewish immigrants alongside their spiritual failures. A selection of memoir, novels, short stories, and poetry in English and in translation from Hebrew and Yiddish demonstrate the multilingual character of the Jewish experience in America. While helpful, no knowledge of Jewish languages, religious tradition, or cultural practice is necessary to succeed in this course. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ENGL 2741.

JUST 2742 Modern Hebrew Literature (4 Credits)
This course offers a survey of some of the most significant works of modern Hebrew literature available in translation. Students consider how the development of Hebrew literature has contributed to the formation of contemporary Israeli identity, and how the conflicts that define the turbulent history of Israel are treated in works by canonical authors. The selection of diverse voices and literary materials exposes students to the soil political, and historically changes wrought by the rise of modern day Israel. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ENGL 2742.

JUST 2743 Jewish Humor: Origins and Meaning (4 Credits)
Writers, scholars, and comedians all claim to locate an identifiable strain of “Jewish humor” running from the Bible through to today’s literary humorists and provocative stand-up comics. This course takes humor seriously in an effort to reveal the development of “Jewish humor” in America from a comparative context. But is there such a thing as Jewish humor? And if so, what are its sources and characteristics? Does it exist across cultures and in different linguistic communities? Through lectures, discussion, exercises and papers, students gain a broad understanding of the history, psychology, and philosophy of humor as it relates to Jewish arts and letters in America. This course is cross-listed with ENGL 2743.

JUST 2745 Israeli Television and Cinema: Representing Cultural Diversity in Israeli Life (4 Credits)
The course goals are three-fold: a) to facilitate students’ communicative competence in Hebrew across the interpretive, interpersonal and presentational modes through constant immersion in Hebrew, b) to expand students’ knowledge and understanding of Israeli society and culture while interacting solely in Hebrew, and c) to help students develop a lifelong interest in learning the Hebrew language and its culture. Screening of Israeli films is a central part of the course. All the films are in Hebrew. The course is not open to native speakers of Hebrew. Cross listed with HEBR 2745. Prerequisite: HEBR 2003 or equivalent.

JUST 2991 Independent Study (1-5 Credits)

JUST 3001 Judaism (4 Credits)
A literary and historical journey through Judaism. This course examines the “Jewish story” from its roots to its modern-day manifestations, focusing on select, classic Jewish texts in their historical contexts. From them, students explore Jewish tradition and practice and actively engage with and in the vivid interpretive imagination of the authors of Judaism throughout the ages. Cross listed with RLGS 3001.

JUST 3010 Aspects of Modern Hebrew (4 Credits)
This course is designed for students who have successfully completed Intermediate Hebrew. It facilitates communicative competence in Hebrew across interpretive, interpersonal and presentational modes through constant immersion in Hebrew. It also expands knowledge of Israeli culture while interacting solely in Hebrew. This course is not open to native speakers of Hebrew. Cross listed with HEBR 3010. Prerequisite: HEBR 2003 or equivalent.
JUST 3023 Great Thinkers: Maimonides-Politics, Prophecy and Providence (4 Credits)
Using "The Guide for the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), one of the central figures in medieval philosophy and Jewish thought. Our study includes analyses of his ideas on: principles of faith, human perfection, intellectual vs. "imaginational" approaches to truth, pedagogy and politics, reasons for the commandments, the nature of God and divine will, the limits of human knowledge, the mechanics of prophecy, and the parameters and implications of providence. Cross listed with PHIL 3023 and RLGS 3023. Prerequisite: junior standing or instructor's permission.

JUST 3024 Maimonides: Greek, Islamic, and Christian Encounters (4 Credits)
Using the "Guide of the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), a central figure in the history of philosophy and in the history of Jewish thought. In this course, we examine in depth the relationship between Maimonides' core ideas and various Greek, Muslim and Christian thinkers, including: Aristotle, Plotinus, al-Farabi, Avicenna (Ibn Sina), al-Ghazali, Averroes (Ibn Rushd), and Aquinas. Topics to be explored include: what is "metaphysics"?; God's unity and essence as existence itself; the mystery of knowing and not knowing God (including a consideration of God's ways as well as "negative theology"—viz. the extent to which we do not know God); God as pure intellect; the nature of the cosmos and the "separate intellects"; creation vs. eternity vs. emanation; philosophical and religious perspectives on the origins of the universe and implications for "living in the world with/out God." In our study, we will also address the methodological implications of cross-religious and cross-language analyses, and how to spot and address (in your own work and in the work of others) tacit cultural biases at play in the interpretive process. Cross listed with PHIL 3024 and RLGS 3024. Prerequisite: Junior standing or instructor's permission.

JUST 3102 Early Judaism (4 Credits)
This course traces the development of Judaism in history and literature from the Babylonian Exile and the end of the biblical period through the origins of Rabbinic Judaism and the completion of the Babylonian Talmud (c. 650 CE). However, special emphasis is placed on Jewish culture in the late Second Temple period (c. 200 BCE to 100 CE) and its impact on the early Christian movement, including Jewish literature from the time of Jesus, lost texts of the Bible, new evidence from the Dead Sea Scrolls, and the few surviving historical sources of the Second Temple Period. In addition, students analyze how the Bible came to be and understand how sacred texts and their interpretations eventually became the new center of both Judaism and Christianity. Cross listed with RLGS 3102.

JUST 3146 Great Thinkers: Levinas (4 Credits)
Emmanuel Levinas (1906-1995), famous for his arresting and original idea of "ethics as first philosophy," an important figure in the histories of phenomenology, metaphysics, and theology. In this course, we set out to explore Levinas' insights on ethics, alterity, and infinity, including the connection of his ideas to Plato, Descartes, Kant, and Husserl, as well as his critical responses to Heidegger and his positive contributions to Derrida. In this course, we work through Levinas' two major works, Ethics and Infinity and Otherwise Than Being or Beyond Essence, as well as a number of shorter writings—including material from his Talmudic commentaries. Themes to be covered include: Being, Goodness, Risk, Ethics, Alterity, Transcendence, Law, Judaism, Gift, Forgiveness, Politics, Theology, and Justice. This course is cross-listed with PHIL 3146.

JUST 3150 The Bible and the Dead Sea Scrolls (4 Credits)
This course includes an advanced study of the Dead Sea Scrolls with a particular focus on the Bible as it appears in the Qumran library. We will discuss the variant versions of the Bible, some of which were previously unknown before the discovery of the Scrolls, and how the findings of the Scrolls may question the very idea of "Bible" itself in the context of the late Second Temple Judaism. Further, we will place particular emphasis on studying the way biblical texts were engaged, interpreted and even written by the authors of the Dead Sea Scrolls. In this way, we shall explore the origins of biblical interpretation and how the notion of the Bible came to be. Cross listed with RLGS 3150. Prerequisites: One year of Hebrew language or equivalent or by special permission of the instructor.

JUST 3151 Dead Sea Scrolls (4 Credits)
The Dead Sea Scrolls represent one of the greatest manuscript finds of the twentieth century and have been said to be the most important discovery in biblical archaeology. These scrolls offer a rare window into early Judaism and Christianity and offer us the earliest and most important witnesses to the (Hebrew) Bible. This course covers the Dead Sea Scrolls in their historical, literary and religious context in English translation, together with relevant scholarly research. Cross listed with RLGS 3151.

JUST 3152 Philosophy Meets Mysticism: A Greek, Jewish and Islamic Neoplatonic Journey (4 Credits)
Neoplatonism is a unique genre - somewhere between philosophy and mysticism. In this course, we investigate some of the leading themes of Neoplatonism, tracing the Greek ideas of Plotinus (the third century "father of Neoplatonism") into later Jewish and Islamic textural traditions. As part of our journey, we investigate a host of philosophical writings, including the Theology of Aristotle and the Liber de Causis, as well as works by Plato, Plotinus, Proclus, Ibn Tufayl, Avicenna, Isaac Israeli, Solomon Ibn Gabirol, and Abraham Ibn Ezra. Themes to be covered include emanation and creation, apophatic discourse, divine desire, the theological significance of imagination, inward reflection, and the call to virtue. Cross listed with PHIL 3152. Prerequisite: junior standing or instructor's permission.

JUST 3215 Modern Jewish Philosophy (4 Credits)
Covering a range of modern thinkers from the seventeenth to the late-twentieth century, topics include reason and revelation, human autonomy and responsibility, aesthetics, post-Holocaust theology, responses to Kant, responses to Heidegger, ethics, and the quest for authenticity. Cross listed with PHIL 3215. Prerequisite: junior standing or instructor's permission.
JUST 3405 Postmodern Visions of Israel (4 Credits)
This course investigates how representations of Israel as a modernist utopia have been replaced in contemporary literature with images of Israel as a dystopia. The class discusses the historical context that gave rise to visions of an idealized Israel, and the role the Hebrew language played in consolidating and connecting narration to nation. Next the class considers how belles-lettres from recent decades have reimagined Israel as a series of multilingual “multiverses.” A selection of fiction translated from Hebrew forms the core of class reading. Theoretical exploration of postmodernism help us conceptualize the poetics of postmodern literature. No knowledge of Israeli history or Jewish culture is necessary to succeed in this course. This course is cross-listed with ENGL 3405.

JUST 3600 United States - Israeli Relations, 1948-Present (4 Credits)
This course deals with the history of United States-Israeli relations from 1948 - 2011. Some of the key topics covered include: the U.S. decision to recognize Israel; cultural foundations for U.S. support of Israel; Christian Zionism; the origins of the U.S.-Israeli "Special Relationship"; the Cold War in the Middle East; U.S. peacemaking successes and failures; the role of the pro-Israeli lobby; and the impact of September 11, 2001 on U.S.-Israeli relations. Cross listed with HIST 3600.

JUST 3700 Topics in Judaic Studies (1-4 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 3702 Colloquium in Jewish Studies (1-4 Credits)
Topics in Judaic Studies reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 3703 Topics in Judaic Studies (1-4 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 3704 Topics in Judaic Studies (1-4 Credits)
Topics vary reflecting the interdisciplinary nature of the department and studies of the faculty.

JUST 3740 Bodies and Souls (4 Credits)
This course examines the unique place of the body in biblical religion. We ask how the Bible and its interpreters have shaped current views on sex and the gendered body in Western society. How has the Bible been (mis)used in relation to current understandings of the physical body? Is the saying that a "human" does not have a body, but is a body as true for the Hebrew Bible as the Christian New Testament? How has Judaism and Christianity (de)valued sexuality, procreation, and celibacy? How do the biblical traditions shape our modern opinions about the ideal physical body and body modifications? How can we understand "out-of-body" experiences and notions of death and afterlife in Western religion? Students are encouraged to interpret the Bible and their own beliefs from a uniquely embodied perspective. Cross listed with GWST 3740, RLGS 3740.

JUST 3743 Modern Jewish Literature (4 Credits)
Stories, novels and memoirs by 20th-century Jewish writers; consideration of issues of generation, gender and idea of Jewish literature as a genre. Cross listed with ENGL 3743.

JUST 3890 Religion and Diaspora (4 Credits)
When forced to leave a homeland, displaced communities frequently turn to religion to maintain identity and adapt to--or resist--new surrounding culture(s). This course examines the role of religion and identity in three Jewish and Christian communities living in diaspora and poses questions such as: What is the relationship between religion and (home)land? How have the biblical themes of exodus, diaspora, promise and restoration been applied to contemporary experiences? And how have our American stories been interpreted through the lens of the Bible? As part of the service learning component, students have the opportunity to work with religious and immigrant aid organizations in the Denver community. Cross listed with RLGS 3890.

JUST 3891 Justice: A Biblical Perspective (4 Credits)
This course explores the ways in which the Bible has been applied to questions of social justice in contemporary society. In addition to studying major theological and philosophical theories of justice, students read a variety of biblical texts related to major issues of social and economic justice such as world hunger, the poor, revolution, just war theory and pacifism, environmentalism, and the role of government. This course includes a service-learning component. Cross listed with RLGS 3891.

JUST 3982 Internship (1-5 Credits)
JUST 3991 Independent Study (1-5 Credits)
Prerequisites: HEBR 1003 or JUST 1003 or equivalent and instructor's permission.

JUST 3992 Directed Study (1-5 Credits)

Department of Languages and Literatures

Office: Sturm Hall, Room 391
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2662
Email: langlit@du.edu
Web Site: http://www.du.edu/ahss/langlit

The Department of Languages and Literatures provides instruction in an array of languages and literatures at the basic and advanced levels. Programs are designed to immerse students in the speech and thought of other nations and in their cultural and literary heritages.
Our mission is to educate by developing and refining linguistic and intellectual abilities that permit our students to engage with us in advancing scholarly inquiry, in cultivating critical and creative thought that recognizes thinking other than what they take for granted and in generating knowledge that at once discovers, respects and transcends differences. Only through an understanding of the language and culture of other countries can barriers of misunderstanding and conflict be broken down. Our aim, therefore, is to give a language major or minor more than a glimpse from the outside at another way of life: it is to give a second identity, a “second heart” or “second soul.” The active partnerships that this enables students to establish with non-Anglophone regional and global communities will contribute toward sustainable common good of national, hemispheric and worldwide scope.

Major and minor programs are offered in French, German, Italian, Russian and Spanish. Minors are available in Chinese and Japanese as well and, by tutorial arrangements, in Hebrew and Latin. Undergraduate offerings also include course work in Arabic and (tutorial) classical Greek. The overwhelming majority of our students take advantage of DU’s unique Cherrington Global Scholars program to study abroad at universities in Europe and Latin America, East Asia and Africa. DU maintains bilateral exchange relationships with the University of Tübingen and the University of Bologna and also participates in the International Student Exchange Program that permits study at scores of universities worldwide.

Not only in classes taught by experienced, dedicated teacher-scholars who use innovative teaching techniques, but also outside the classroom, our undergraduates experience a strong sense of enthusiasm and community both among themselves and with their instructors. Senior faculty are involved at every level of instruction as well as in student advising and mentoring.

Alumni of the department have pursued diverse international careers immediately upon graduation or have undertaken post-graduate studies, often with fellowships (e.g., Fulbright, Guggenheim), in a variety of academic and professional fields. Among institutions to which they have recently gone are American University, George Washington University, Michigan State University, the University of New Mexico, the University of Pittsburgh, SUNY-Buffalo and the University of Colorado at Boulder; they have also gone overseas to attend the University of Oxford and to Germany with the US Congress-Bundestag Youth Exchange Program (CBYX). Others have gone on to earn advanced degrees in DU’s own excellent graduate schools (business or law, international studies, social work and education). Opportunities for public sector, private sector and NGO careers on five continents are as boundless as an educated student linguist’s ambitions.

Chinese

Minor Requirements

A minimum of 24 credits of approved courses above CHIN 2001. Four credits must be CHIN 3300 or above, or equivalent from study in China. CHIN 1516 Contemporary China in Literature and Films, which partially fulfills the Analytical Inquiry: Society and Culture requirement, can be used for credit toward the minor. Students who study abroad in China are strongly encouraged to enroll in a Chinese course (CHIN 3300 or above) upon their return.

French

Bachelor of Arts Major Requirements

(183 credits required for the degree (p. 38))

44 credits of approved courses beyond FREN 1003.

Required courses include FREN 2400, a 2000-level literature class, a culture class at the 2000 or 3000 level, two 3000-level literature classes and a 3000-level grammar or language skills class. Credits earned through the Cherrington Global Scholar Program from classes that have been approved by the French study abroad advisor are counted as DU credits toward a French major/minor. Students who have returned from studying abroad are required to take a minimum of one FREN course at DU for the major.

Secondary Major Requirements

44 credits. Same requirements as for BA degree.

Minor Requirements

A minimum of 24 credits of approved courses beyond FREN 1003. For the emphasis in literature, required courses include FREN 2400, a 2000-level literature class, a 2000-level culture class and a 3000-level literature class. Credits earned through the Cherrington Global Scholar Program from classes that have been approved by the French study abroad advisor are counted as DU credits toward a French major/minor. Minors who choose to study abroad are strongly encouraged to enroll in a French course upon their return.

French Culture and Civilization

Minor Requirements

A minimum of 24 credits of approved courses beyond FREN 1003. Requirements include FREN 2400, a 2000-level culture class, a 2000-level literature class, and a 3000-level culture class. Credits earned through the Cherrington Global Scholar Program from classes that have been approved by the
French study abroad advisor are counted as DU credits toward a French major/minor. Minors who choose to study abroad are strongly encouraged to enroll in a French course upon their return.

**German**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree (p. 38))

44 credits of approved courses beyond GERM 1003.

Four of these 44 credits must be from GERM 1416. No fewer than eight of these 44 credits must be from 3000-level courses. Students may count one additional course in English on German culture, history or literature toward the major. Students majoring in German are encouraged to study abroad in Germany. Majors who choose to study abroad in Germany are strongly encouraged to enroll in a German course upon their return.

**Secondary Major Requirements**

44 credits. Same requirements as for BA degree.

**Minor Requirements**

A minimum of 24 credits of approved courses beyond GERM 1003. Students who minor in German are encouraged to study abroad in Germany. Minors who choose to study abroad in Germany are strongly encouraged to enroll in a German course upon their return.

**Hebrew**

**Minor Requirements**

A minimum of 20 credits of study beyond HEBR 1003.

**Italian**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree (p. 38))

44 credits of approved courses beyond ITAL 1003.

Four of these 44 credits must be from ITAL 2500 or ITAL 3010. No fewer than eight of these 44 credits must be from 3000-level Italian topics courses. Students may count one course taught in English on Italian culture, history or literature toward the major. Students who major in Italian are encouraged to study abroad in Italy. Credits earned from classes in Italy that have been approved by the faculty are counted as DU credits toward an Italian major. Majors who choose to study abroad in Italy are strongly encouraged to enroll in an Italian course upon their return.

**Secondary Major Requirements**

44 credits. Same requirements as for BA degree.

**Minor Requirements**

A minimum of 24 credits of approved courses beyond ITAL 1003. Students who minor in Italian are encouraged to study abroad in Italy. Credits earned from classes in Italy that have been approved by the faculty are counted as DU credits toward the Italian minor. Minors who choose to study abroad in Italy are strongly encouraged to enroll in an Italian course upon their return.

**Japanese**

**Minor Requirements**

A minimum of 24 credits of approved courses. 20 credits must be language classes beyond JAPN 2001. One course must be JAPN 1416 Postwar Japan: Changing Perspectives in Literature and Culture, and one a four-credit language course at the 3000 level.
Latin

Minor Requirements
A minimum of 20 credits of study beyond LATN 1003.

Russian

Bachelor of Arts Major Requirements
(183 credits required for the degree (p. 38))

44 credits of approved courses beyond RUSS 1003.

Requirements include two 3000-level courses and RUSS 3101; students are encouraged to take either RUSS 1416 or RUSS 2416 for credit in the major. Study abroad in Russia through the Cherrington Global Scholars Program and a service learning/internship in Denver’s Russian-speaking community, though not required, are strongly encouraged. The number of credits earned through these experiences is established by agreement with faculty in Russian and is subject to institutional requirements.

Secondary Major Requirements
44 credits. Same requirements as for BA degree.

Minor Requirements
A minimum of 24 credits of approved courses beyond RUSS 1003, including one 3000-level course; students are encouraged to take either RUSS 1416 or RUSS 2416 for credit in the minor. Study abroad in Russia through the Cherrington Global Scholars Program and a service learning/internship in Denver’s Russian-speaking community, though not required, are strongly encouraged. The number of credits earned through these experiences is established by agreement with faculty and is subject to institutional requirements.

Spanish

Bachelor of Arts Major Requirements
(183 credits required for the degree (p. 38))

44 credits of approved courses above the level of SPAN 2001.

Required courses include SPAN 2100, SPAN 2300, SPAN 2350, and SPAN 3990. SPAN 3990 must be taken at DU and a student must have senior standing and have taken a minimum of 12 credits at the 3000 level prior to enrolling in this course.

Secondary Major Requirements
44 credits. Same requirements as for BA degree.

Minor Requirements
A minimum of 24 credits of courses above the level of SPAN 2001 including SPAN 2100, SPAN 2300, SPAN 2350. A minimum of four credits must be at the 3000 level.

Arabic Courses

ARAB 1001 Elementary Arabic (4 Credits)
Basics of Modern Standard Arabic. Three quarter sequence.

ARAB 1002 Elementary Arabic (4 Credits)
Basics of Modern Standard Arabic. Three quarter sequence.

ARAB 1003 Elementary Arabic (4 Credits)
Basics of Modern Standard Arabic. Three quarter sequence.

ARAB 2001 Intermediate Arabic (4 Credits)
Continued study of Arabic language with an enhanced cultural component. Two quarter sequence. Prerequisite: ARAB 1003 or equivalent.

ARAB 2002 Intermediate Arabic (4 Credits)
Continued study of Arabic language with an enhanced cultural component. Two quarter sequence. Prerequisite: ARAB 2001 or equivalent.
ARAB 2100 Conversation & Composition (4 Credits)
This is the third quarter of the second year. Intensive practice in oral skills and grammar review. Writing, discussion and reading based on a topic or topics in Arabic language and culture. Increased attention paid to writing skills. Prerequisite: ARAB 2002, equivalent, or permission of instructor.

ARAB 3700 Topics in Arabic (1-4 Credits)
ARAB 3701 Topics in Arabic (1-4 Credits)
ARAB 3702 Topics in Arabic (1-4 Credits)
ARAB 3703 Topics in Arabic (1-4 Credits)
ARAB 3704 Topics in Arabic (1-4 Credits)
ARAB 3991 Independent Study (1-5 Credits)

Chinese Courses

CHIN 1001 Elementary Chinese (4 Credits)
Part one of an introductory three-quarter sequence of courses in standard (Mandarin) modern Chinese, aimed at building a solid foundation in all aspects: pronunciation (especially tones), basic grammar, syntax, vocabulary and writing in characters.

CHIN 1002 Elementary Chinese (4 Credits)
Part two of an introductory three-quarter sequence of courses in standard (Mandarin) modern Chinese, aimed at building a solid foundation in all aspects: pronunciation (especially tones), basic grammar, syntax, vocabulary and writing in characters.

CHIN 1003 Elementary Chinese (4 Credits)
Part three of an introductory three-quarter sequence of courses in standard (Mandarin) modern Chinese, aimed at building a solid foundation in all aspects: pronunciation (especially tones), basic grammar, syntax, vocabulary and writing in characters.

CHIN 1516 Contemporary China in Literature and Films (4 Credits)
This course investigates, through critically examining the representative literary and filmic texts produced by Chinese as well as foreign writers and filmmakers, the many complicated aspects of some much-talked about issues. This includes the diminishing rural life and landscape, urbanization, migration/dislocation, the changing roles of women, social equality, as well as the balancing act of preserving tradition, the environment, and economic development. The in-depth examination and diverse approaches this course applies enables students to gain greater understanding of not only the challenges that contemporary China has raised, but also the complexities of the increasingly globalized world in which we are living. Cross listed with ASIA 1516. This course counts toward the Analytical Inquiry: Society and Culture requirement.

CHIN 1992 Directed Study (1-10 Credits)

CHIN 2001 Intermediate Chinese (4 Credits)
A three quarter sequence of courses continues to build students’ basic skills and to advance them to intermediate level proficiency. Prerequisite: CHIN 1003, equivalent, or permission of instructor.

CHIN 2002 Intermediate Chinese (4 Credits)
A three quarter sequence of courses continues to build students’ basic skills and to advance them to intermediate level proficiency. Prerequisite: CHIN 2001, equivalent, or permission of instructor.

CHIN 2003 Intermediate Chinese (4 Credits)
A three quarter sequence of courses continues to build students’ basic skills and to advance them to intermediate level proficiency. Prerequisite: CHIN 2002, equivalent, or permission of instructor.

CHIN 2100 Advanced Intermediate Chinese (4 Credits)
This single-quarter course is one of the transitional courses from intermediate Chinese to advanced Chinese. The course materials, while continuing from the CHIN 2001-2002-2003 sequence, give students more opportunities to synthesize vocabulary and grammatical patterns they have learned from previous courses. The introduction of major grammatical patterns is completed by the end of this course. Prerequisite: CHIN 2003, equivalent, or permission of instructor.

CHIN 2301 Chinese Conversation (4 Credits)
This single-quarter course is one of the transitional courses to the advanced-level courses, particularly designed to advance students’ skills in speaking. Prerequisite: CHIN 2100, equivalent, or permission of instructor.

CHIN 2302 Chinese Composition (4 Credits)
This single-quarter course aims to develop all skills to higher levels of proficiency with emphasis on achieving greater facility in writing Chinese and competence in composing simple essays. Prerequisite: CHIN 2100, equivalent, or permission of instructor.

CHIN 2992 Directed Study (1-10 Credits)

CHIN 3101 Conversation and Composition I (4 Credits)
This single quarter course is particularly designed to develop further students’ speaking and writing skills. Prerequisite: CHIN 2003, equivalent, or permission of instructor.
**CHIN 3102 Advanced Conversation and Composition (4 Credits)**
This course aims to develop all skills to high levels of proficiency. Emphasis is placed on speaking and writing. Greater facility in writing Chinese characters and competence in composing simple essays is expected. Prerequisite: CHIN 3101, equivalent, or permission of instructor.

**CHIN 3300 Chinese Society in Transition (4 Credits)**
Through studying selected texts and focusing on topics about various aspects of Chinese society in transition, this class aims at strengthening and further developing students’ overall skills, in particular, skills of reading comprehension, presenting information and one’s opinions, and debating with other people. Prerequisite: CHIN 3102, equivalent, or permission of instructor.

**CHIN 3400 Chinese Cinema and Chinese Society (4 Credits)**
This advanced class is designed to strengthen and to develop further students’ overall Chinese proficiency and in-depth understanding of the contemporary societies of greater China, including mainland China, Hong Kong and Taiwan, by means of studying the representative Chinese language films produced in these three areas. Prerequisite: CHIN 2003, equivalent, or permission of instructor.

**CHIN 3500 Advanced Reading in Modern Chinese Literature (4 Credits)**
This course requires students to read closely and examine critically the many sophisticated and subtle cultural, historical and linguistic aspects of the selected literary works of various genres in modern Chinese literature. Prerequisite: CHIN 3400, equivalent, or permission of instructor.

**CHIN 3601 Business Chinese I (4 Credits)**
Advanced reading course designated for students who have an advanced level of Chinese language proficiency or who are in their fourth year of a Chinese language curriculum either at the undergraduate or graduate level. Prerequisite: CHIN 3300, equivalent, or permission of instructor.

**CHIN 3650 Chinese-English Translation I (4 Credits)**
This seminar is designed for students with advanced-level proficiency in Chinese and English to learn basic translation theories and to develop fundamental skills in translating, from Chinese to English and vice versa, texts which primarily deal with general social needs and everyday communications. Prerequisite: CHIN 3300 or above, equivalent, or permission of instructor.

**CHIN 3700 Topics in Chinese Cultural Studies (4 Credits)**
Advanced studies of selected topics on Chinese cultural studies. Prerequisite: CHIN 3300, equivalent, or instructor approval.

**CHIN 3991 Independent Study (1-5 Credits)**
**CHIN 3992 Directed Study (1-10 Credits)**

**French Courses**

**FREN 1001 Français élémentaire (4 Credits)**
Basic grammar, syntax and vocabulary with emphasis on oral skills; introduction to French and Francophone cultures. First quarter in a three quarter sequence.

**FREN 1002 Français élémentaire (4 Credits)**
Basic grammar, syntax and vocabulary with emphasis on oral skills; introduction to French and Francophone cultures. Second quarter in a three quarter sequence. Prerequisite: FREN 1001 or equivalent.

**FREN 1003 Français élémentaire (4 Credits)**
Basic grammar, syntax and vocabulary with emphasis on oral skills; introduction to French and Francophone cultures. Third quarter in a three quarter sequence. Prerequisite: FREN 1002 or equivalent.

**FREN 1992 Directed Study (1-10 Credits)**

**FREN 2001 Français du deuxième degré (4 Credits)**
Grammatical structures, conversation and reading of cultural and literary materials. First quarter of a three quarter sequence. Prerequisite: FREN 1003 or equivalent.

**FREN 2002 Français du deuxième degré (4 Credits)**
Grammatical structures, conversation and reading of cultural and literary materials. Second quarter of a three quarter sequence. Prerequisite: FREN 2001 or equivalent.

**FREN 2003 Français du deuxième degré (4 Credits)**
Grammatical structures, conversation and reading of cultural and literary materials. Third quarter in a three quarter sequence. Prerequisite: FREN 2002 or equivalent.

**FREN 2020 Langue, Culture, Film: L’Identité (4 Credits)**
This course studies the idea of identity in francophone culture, looking specifically at the relationship of self and others. Five French-language films serve as the basis for oral practice, grammar review, composition and cultural study. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and at least one additional course above that level.

**FREN 2021 Langue, Culture, Film: les Français et leur histoire (4 Credits)**
This course studies the way in which historical films represent both the past and the time period during which they were made. We examine foundational myths of the middle ages, the French Revolution, the Resistance during WWII, the Algerian war and colonialism. Five French-language films serve as the basis for oral practice, grammar review, composition and cultural study. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and at least one additional course above that level.
FREN 2023 Langue, Culture, Film: Paris - mythe et réalité (4 Credits)
This course studies the way in which historical films represent both the past and the time period during which they were made. We examine foundational myths of the Middle Ages, the French Revolution, the Resistance during WWII, the Algerian war, and colonialism. Five French-language films serve as the basis for oral practice, grammar review, composition and cultural study. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and at least one additional course above that level.

FREN 2100 Ecrire, lire et parler (4 Credits)
Writing, discussion and reading based on a topic or topics in French and Francophone cultures. Close attention paid to paper-writing skills. Prerequisite: FREN 2003 or equivalent.

FREN 2200 Le Monde du travail (4 Credits)
Study of professional and commercial culture in France and within the European Union, along with socio-cultural issues and concerns relative to 21st-century work environment. Development of proficiency in work-related vocabulary, communication skills, as well as sensitivity to work-life balance; class, gender, and ethnicity issues in the workplace. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and one course above that level.

FREN 2400 Conversation et composition (4 Credits)
Intensive practice in spoken and written French. All aspects of the course, including vocabulary acquisition, phonetics, structural review, compositions, readings, oral presentations and comprehension exercises are presented through a topical approach to everyday French and Francophone life, literature, and contemporary issues. Prerequisite: FREN 2003 or equivalent.

FREN 2500 Introduction à la littérature (4 Credits)
Introduction to critical analysis and appreciation of literary texts in French. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and one course above that level.

FREN 2501 La Nature et l'Environnement (4 Credits)
What does French literature have to say about nature? When was the first poem lamenting the loss of a forest written in France? How are novelists today responding to and imagining our changing environment? While serving as an introduction to French literature, this course focuses on themes related to nature, the environment, and humanity’s ways of understand and relating to them. The readings may include nature poetry, works of fiction in which the natural world strongly influences its human inhabitants, or futuristic fictional worlds in which the normal places occupied by humans and animals seem to be confused or upended. This course may be taken in addition to other courses in the 25-series. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: FREN 2400 or its equivalent.

FREN 2600 Culture contemporaine (4 Credits)
A study of the political, economic, educational, social, and religious institutions of present-day France, as well as its relations with the United States and the European Union. Prerequisite: FREN 2400.

FREN 2701 Sujets spéciaux (4 Credits)
Selected topics in French or Francophone literature and/or culture. May be repeated for credit. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisites: FREN 2003 and one course above that level.

FREN 2992 Directed Study (1-10 Credits)
FREN 2997 Internship Abroad (1-4 Credits)
A business or community experience related to French language or culture. Opportunity to work with business or community organizations. Prerequisite: FREN 2003 or above.

FREN 3110 La Grammaire à l’oeuvre (4 Credits)
Our most advanced language course, students perfect their knowledge of French grammar in all of its intricacies. Written and oral practice. Prerequisites: FREN 2003 and two courses above that level.

FREN 3150 L’Art de la traduction: français-anglais et vice versa (4 Credits)
This course is an introduction to the art of translating/transposing a given text from one language into another without betraying the author's original intent. We read, analyze and discuss in class contemporary literary and journalistic texts originally written in French, and we translate them into English. We, as well, do the same with texts originally written in English. We also read together, analyze, and discuss in class theoretical texts on the art and techniques of translating. Prerequisites: FREN 2003 and two courses above that level.

FREN 3500 Voltaire et Rousseau (4 Credits)
French Enlightenment including Voltaire, Diderot, Rousseau. Prerequisite: FREN 2500 or equivalent.

FREN 3502 Siècle de Louis XIV (4 Credits)
An analytical study of seventeenth-century French theatre in its three greatest exemplars: the tragedies of Corneille and Racine and the comedies of Moliere. Prerequisite: FREN 2500.
**Department of Languages and Literatures**

**FREN 3505 Masques du moi (4 Credits)**
Qui suis-je??? The question of self, identity, and discovering "who I am" has haunted many writers. Just as a painting can be a "self-portrait," novels, stories, poems, and films seem to look for the deepest truth about the self as well as acknowledging how hard it is to find it! This class is a study of writers (or filmmakers) who ask who they are and who they appear to be to others. Whether they write about their families, their childhoods, their dreams, or their cultural or historical identity, whether they seem to be recounting the "true" facts of their lived experience or mixing in some fictions, they are all engaged in fashioning a story of the self. Join us as we explore versions of the self. The class is conducted all in French and emphasizes discussion, writing, and critical thinking. Prerequisite: FREN 2500 or another Introduction to Literature course, or the equivalent.

**FREN 3507 Autres du moi (4 Credits)**
A comprehensive and analytical study of women authors of France from the Middle Ages to the present. Prerequisite: FREN 2500.

**FREN 3600 Civilization française (4 Credits)**
An intensive overview of the history, art, music, and literature of France from the Roman era to the present. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: FREN 2400.

**FREN 3603 Civilization - Sujets spéciaux (4 Credits)**
An intensive analysis of French Society and its cultural manifestations in arts and letters in the seventeenth century. Prerequisite: FREN 2400.

**FREN 3701 Séminaire (4 Credits)**
Selected authors, literary movements and genres in French-speaking world. May be repeated for credit. Prerequisite: FREN 2500.

**FREN 3810 Littérature francophone I (4 Credits)**
Literatures of French expression from Africa, the Caribbean, Belgium, Canada and Switzerland. Prerequisite: FREN 2500.

**German Courses**

**GERM 1001 Elementary German (4 Credits)**
Basic speech patterns, grammar and syntax; emphasis on oral skills; introduction to German culture. First quarter of three quarter sequence.

**GERM 1002 Elementary German (4 Credits)**
Basic speech patterns, grammar and syntax; emphasis on oral skills; introduction to German culture. Second quarter of three quarter sequence.

**GERM 1003 Elementary German (4 Credits)**
Basic speech patterns, grammar and syntax; emphasis on oral skills; introduction to German culture. Third quarter of three quarter sequence.

**GERM 1416 German Civilization: History, Politics, and Culture (4 Credits)**
This course is an introduction to intellectual and cultural currents in German civilization from the Enlightenment to the present, emphasizing the arts in the context of history and philosophy from the late 18th century to around the mid-20th century. Readings include excerpts from such thinkers as Kant, Fichte, Marx, Nietzsche, Weber, as well as poetry and short fictional works by Heine, Jünger, Remarque, Borchert, and others. The readings are supplemented by films that students are expected to have watched at the beginning of each week. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**GERM 2001 Intermediate German (4 Credits)**
Vocabulary expansion and grammar review, conversation, readings of cultural and literary materials. Prerequisite: GERM 1003 or equivalent. First quarter of three quarter sequence.

**GERM 2002 Intermediate German (4 Credits)**
Vocabulary expansion and grammar review, conversation, readings of cultural and literary materials. Prerequisite: GERM 2001 or equivalent. Second quarter of three quarter sequence.

**GERM 2003 Intermediate German (4 Credits)**
This course challenges students to continue expanding their vocabulary in German and to increase their fluency in speaking, listening and reading. Students are expected to demonstrate a growing awareness of - and sensitivity to - German culture and express their ideas in a manner consistent with advanced language work. Prerequisite: GERM 2002 or equivalent.

**GERM 2022 German Cinema: An Introduction to German Culture, History, and Politics through Film (4 Credits)**
This is an introduction to 20th- and 21st-century German culture, history, and politics through film analysis. Studying the most famous and influential films in the history of German cinema, students explore a wide range of topics (including political propaganda, national identity, multiculturalism, terrorism, education and youth, the arts, gender, and class) and investigate how a popular culture medium like film can capture the political, social, and economic atmosphere in society. This course counts toward the Analytical Inquiry: Society and Culture requirement.
GERM 2100 Conversation and Composition (4 Credits)
Intensive practice in oral skills, reading and writing. Prerequisite: GERM 2003 or equivalent.

GERM 2350 German Film (4 Credits)
Analysis of selected films centered on major themes in the humanities. Prerequisite: GERM 2003 or equivalent.

GERM 2701 Topics in German Literature (4 Credits)
Selected authors or movements in literature of the German-speaking world. May be repeated for credit. Prerequisite: GERM 2003 or equivalent.

GERM 2800 Advanced German Grammar and Composition (4 Credits)
This course offers an in-depth review of advanced grammar structures. Review of grammar in context, as well as practice in composition. Prerequisite: GERM 2100 or equivalent.

GERM 3125 Einigkeit, Recht, Freiheit: German Culture & Society 1815-1871 (4 Credits)
The course examines the impact and aftermath of the French Revolution, Napoleon Bonaparte, and the Wars of Liberation on those German states that until 1806 formed the "Holy Roman Empire of German Nation." The Congress of Vienna in 1815 greatly simplified the political division of Germany, preparing the eventual economic and political unification of Germany in 1871. We trace issues such as freedom, restoration, revolution, and reaction, as well as the rise of socialism. The course closes with the ascent of Otto von Bismarck and German unification in 1871. Prerequisite: GERM 2100 or equivalent, or another 2000-level GERM class beyond 2003.

GERM 3225 Das Kaiserreich: German Culture & Society 1871-1918 (4 Credits)
This course analyzes how, under the leadership of Prussia and Bismarck, Germany emerged as a nation and world power in the late 19th century. We investigate the interplay of politics and culture at a time when German society experienced rapid and drastic changes from an agrarian-based economy to modern industrial capitalism under nationalist tutelage. We study a variety of cultural manifestations and responses to, among other things, industrialization and social reform, urbanization, socialism, Germanization policies, "Kulturkampf" with the Catholic Church, and German colonialism under William II to contextualize the eruption of Europe into World War I that marked, in 1918, the end of the Empire. Prerequisite: GERM 2100 or equivalent, or another 2000-level GERM class beyond 2003.

GERM 3325 Die Weimarer Republik: German Culture & Society 1918-1933 (4 Credits)
This course analyzes how violence, economic and political volatility, technology, and changing moral codes affected German society and culture (literature, visual arts, film and music) from the onset of the First World War to the rise of Nazism. Germany's first experiment in democracy, the Weimar Republic, can be viewed both as a prelude to Fascism (and therefore a failure) and as a period of radical socio-cultural change, experimentation, and even progress. This course is taught primarily in German, but occasionally we discuss particular texts in English. Prerequisite: GERM 2003 or equivalent.

GERM 3425 Nachkriegsdeutschland: German Culture & Society 1945-1990 (4 Credits)
This course introduces the student to crucial aspects of the immediate postwar years: Germany's 'Stunde Null'; denazification & reeducation; occupation; 'Americanization' of Germany; 'Berliner Blockade'; the divided memory in East and West Germany; democracy in Germany; the Cold War and 'Berliner Mauer.' Via film, literature, and historical studies we explore how both Germanies (East and West) dealt with the legacy of World War II and the Holocaust. During the first third of the course we have a close look at the concerns of the immediate postwar years 1945-49. Most Germans considered these years of occupation, hunger, homelessness, and despair in a vastly destroyed homeland as much worse than the war that preceded them. Then we investigate critiques of the so-called 'normalization' of Germany's internal and external affairs between the founding of two separate German states and the ensuing 'economic miracle' in West Germany (1949-61). Finally, we trace the development of this 'divided nation' until collapse and reunification in 1989/90. Prerequisite: GERM 2100 or equivalent, or another 2000-level GERM class beyond 2003.

GERM 3525 Die Berliner Republik: German Culture & Society 1990-today (4 Credits)
For roughly two decades, Germany, a once divided nation in the heart of Europe held responsible for two World Wars, has been re-united. Forty years of division between West and East Germany--a division exacerbated by their respective geopolitical roles in the Cold War--left their mark on what many intellectuals considered a 'cultural nation' in spite of their political separation. Our class examines the pains and gains of twenty years of unity. We analyze various political, historical, but mostly cultural developments (and debates) that have accompanied and, at times, questioned this unification. Prerequisite: GERM 2003 or equivalent.

GERM 3625 Business German--From Culture-Shock to Cross-Cultural Competence (4 Credits)
This course is designed to enhance the students' speaking, reading and writing skills, in addition to helping them build a strong foundation in business vocabulary. Course objectives include acquiring skills in cross cultural communication, teamwork, business management, and creating a business plan. German grammar is covered on a need be basis. This course prepares students to perform and contribute while in a German-speaking business environment. Prerequisite: GERM 2100 or equivalent, or another 2000-level GERM class beyond 2003.

GERM 3701 Topics in German Literature (1-4 Credits)
Selected authors, literary movements and genres in German-speaking world. May be repeated for credit. Prerequisite: GERM 2100 or equivalent, or another 2000-level GERM class beyond 2003.

GERM 3991 Independent Study (1-5 Credits)
GERM 3995 Independent Research (1-10 Credits)
GERM 3997 Internship in German (1-4 Credits)
GERM 3998 Honors Thesis in German (1-5 Credits)
Greek Courses

GREK 1001 Elementary Greek (Classical) (4 Credits)
Available only as tutorial with permission of instructor.

GREK 1002 Elementary Greek (Classical) (4 Credits)
Available only as tutorial with permission of instructor.

GREK 1003 Elementary Greek (Classical) (4 Credits)
Available only as tutorial with permission of instructor.

GREK 1416 Myths of Greece & Rome (4 Credits)
Introduction to the goddesses and gods, heroes and heroines, and not a few monstrosities from popular tradition, literature, and visual arts of the ancient Greeks and Romans. Activities include imaginative and creative assignments. No prerequisite. This course counts toward the Analytical Inquiry: Society and Culture requirement.

GREK 1992 Directed Study (1-4 Credits)
GREK 3991 Independent Study (1-5 Credits)

Hebrew Courses

HEBR 1001 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 1002 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 1003 Elementary Hebrew (4 Credits)
Introduction to classical grammar, syntax and modern speech patterns. Three quarter sequence.

HEBR 2001 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.

HEBR 2002 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.

HEBR 2003 Intermediate Hebrew (4 Credits)
Continuation of language study with emphasis on the living language of contemporary Israel. Three-quarter sequence. Prerequisite: HEBR 1003 or equivalent.

HEBR 2745 Israeli Television and Cinema: Representing Cultural Diversity in Israeli Life (4 Credits)
The course goals are three-fold: a) to facilitate students’ communicative competence in Hebrew across the interpretive, interpersonal and presentational modes through constant immersion in Hebrew, b) to expand students’ knowledge and understanding of Israeli society and culture while interacting solely in Hebrew, and c) to help students develop a lifelong interest in learning the Hebrew language and its culture. Screening of Israeli films is a central part of the course. All the films are in Hebrew. The course is not open to native speakers of Hebrew. Cross listed with JUST 2745. Prerequisite: HEBR 2003 or equivalent.

HEBR 3010 Aspects of Modern Hebrew: Readings, Films, Songs, and Discussion (4 Credits)
This course is designed for students who have successfully completed Intermediate Hebrew. It facilitates communicative competence in Hebrew across interpretive, interpersonal and presentational modes through constant immersion in Hebrew. It also expands knowledge of Israeli culture while interacting solely in Hebrew. This course is not open to native speakers of Hebrew. Cross listed with JUST 3010. Prerequisite: HEBR/JUST 2003.

HEBR 3991 Independent Study (1-5 Credits)
HEBR 3992 Directed Study (1-4 Credits)

Italian Courses

ITAL 1001 Elementary Italian (4 Credits)
Elementary Italian is a 3-part communicative sequence in Italian. It is designed for students who have no prior knowledge of Italian. The objective of the sequence is to develop listening, reading, writing and speaking skills through communicative in-class activities and at-home assignments. Elementary Italian also includes the study of contemporary Italian culture, which serves as the basis both for at-home work and in-class discussion.

ITAL 1002 Elementary Italian (4 Credits)
Elementary Italian is a 3-part communicative sequence in Italian. It is designed for students who have no prior knowledge of Italian. The objective of the sequence is to develop listening, reading, writing and speaking skills through communicative in-class activities and at-home assignments. Elementary Italian also includes the study of contemporary Italian culture, which serves as the basis both for at-home work and in-class discussion.
ITAL 1003 Elementary Italian (4 Credits)
Elementary Italian is a 3-part communicative sequence in Italian. It is designed for students who have no prior knowledge of Italian. The objective of the sequence is to develop listening, reading, writing and speaking skills through communicative in-class activities and at-home assignments. Elementary Italian also includes the study of contemporary Italian culture, which serves as the basis both for at-home work and in-class discussion.

ITAL 2001 Intermediate Italian (4 Credits)
Intermediate Italian is a 2-part intermediate communicative sequence in Italian. It is designed for students who have completed Italian 1003 or the equivalent. The aim of the course is further to develop listening, reading, writing and speaking skills through communicative in-class activities and at-home assignments. The sequence presents new grammatical and vocabulary functions as well as review patterns already presented in the elementary sequence. Intermediate Italian also includes the study of contemporary cultural and literary readings that will serve as the basis both for at-home work and in-class discussion. Prerequisite: ITAL 1003 or equivalent.

ITAL 2002 Intermediate Italian (4 Credits)
Intermediate Italian is a 2-part intermediate communicative sequence in Italian. It is designed for students who have completed Italian 1003 or the equivalent. The aim of the course is further to develop listening, reading, writing and speaking skills through communicative in-class activities and at-home assignments. The sequence presents new grammatical and vocabulary functions as well as review patterns already presented in the elementary sequence. Intermediate Italian also includes the study of contemporary cultural and literary readings that will serve as the basis both for at-home work and in-class discussion. Prerequisite: ITAL 1003 or equivalent.

ITAL 2005 Reading and Conversation (4 Credits)
In Reading and Conversation, students learn the ease of expression in Italian through the intermediate-level reading of cultural and literary materials and through the study of vocabulary. Readings and contemporary issues are discussed in class. Prerequisite: ITAL 2002 or equivalent.

ITAL 2201 20th-Century History and Culture (4 Credits)
This course provides a historical and cultural approach to 20th-century Italy. Students refine their critical thinking skills as well as substantially develop their argumentative skills. This course centers on selected authors, literary movements, genres and historical and contemporary cultural phenomena in Italy. Topics may include film, TV, poetry, short stories, fascism and the resistance movement, Italian women, etc. Each week a new decade is discussed in a historical context and supplemented with cultural artifacts that are either centered on the decade in question or produced during the period. This course is taught in English. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ITAL 2355 Images of Rome in Literature & Film (4 Credits)
The city of Rome has been a major protagonist on the stage of history for several millennia. In 2,500 years of existence, Rome has seen more of the world’s history unfold at its doorsteps than any other capital in the western world. It has been the site of the building and the expansion of a vast and powerful Empire, the center of a major world religion, and a magnet for the arts throughout the centuries. This course focuses on late 19th- and 20th-Century Rome from the point of view of selected works of Italian literature (poetry, short stories, and novels or selections from novels) and films in which the city of Rome plays a prominent role. Students demonstrate the ability to identify, interpret, and analyze the connections between the texts and films. This course is taught in English. This course counts toward the Analytical Inquiry: Society and Culture requirement.

ITAL 2500 Introduction to Italian Literature (4 Credits)
Introduction and overview of Italian literature from 13th century to present; works representing major authors, periods, themes and forms. Prerequisite: ITAL 2005, equivalent, or instructor’s permission.

ITAL 3010 Advanced Conversation and Composition (4 Credits)
This course continues to refine students’ oral and written skills while enhancing their cultural awareness. Concepts, such as contemporary Italian politics, economy, and gastronomy, are introduced through authentic texts. Specific emphasis is placed on written skills—providing students with the necessary writing skills for continued study in Italian. Prerequisite: ITAL 2005, equivalent, or instructor’s permission.

ITAL 3201 19th-Century History and Culture (4 Credits)
This course aims to provide a historical and cultural approach to 19th-century Italy, while improving students’ Italian language skills. The course centers on selected authors, literary movements, genres and historical and contemporary cultural phenomena in Italy. Topics may include Italian unification, the historical novel, film adaptation, industry vs. nature, etc. Prerequisite: ITAL 2005 or equivalent.

ITAL 3350 Italy through Cinema (4 Credits)
This film course enhances students’ knowledge of Italian culture, politics and the economy. Prerequisite: ITAL 2005, equivalent or instructor’s permission.

ITAL 3701 Topics in Italian Studies (4 Credits)
Selected authors, literary movements, genres, and historical and contemporary cultural phenomena in Italy. Recent topics have included Nord-Sud: Viaggi in Italia, Italian City in Literature and Film, Italian Contemporary Novel, Identità a tavola, Teatro del ’700. Il fantastico, Love and War in the Renaissance, Performance of Italian Theatre, Boccaccio e la novella, Poeti del romanticismo, Dante. May be repeated for credit. Prerequisite: ITAL 2005, equivalent, or instructor’s permission.

ITAL 3702 Topics in Italian Studies (1-4 Credits)
Selected authors, literary movements, genres, and historical and contemporary cultural phenomena in Italy. Recent topics have included Nord-Sud: Viaggi in Italia, Italian City in Literature and Film, Italian Contemporary Novel, Identità a tavola, Teatro del ’700. Il fantastico, Love and War in the Renaissance, Performance of Italian Theatre, Boccaccio e la novella, Poeti del romanticismo, Dante. May be repeated for credit. Prerequisite: ITAL 2005, equivalent, or instructor’s permission.
ITAL 3703 Topics in Italian Studies (1-4 Credits)
Selected authors, literary movements, genres, and historical and contemporary cultural phenomena in Italy. Recent topics have included Nord-Sud: Viaggi in Italia, Italian City in Literature and Film, Italian Contemporary Novel, Identità a tavola, Teatro del ’700, Il fantastico, Love and War in the Renaissance, Performance of Italian Theatre, Boccaccio e la novella, Poeti del romanticismo, Dante. May be repeated for credit. Prerequisite: ITAL 2005, equivalent, or instructor’s permission.

ITAL 3991 Independent Study (1-5 Credits)
ITAL 3995 Independent Research (1-10 Credits)
ITAL 3998 Undergraduate Honors Thesis (1-5 Credits)
This course will guide students who are majoring in Italian in the selection of a topic for their honors thesis, research materials, and individual meetings with the professor(s) directing the thesis.

Japanese Courses

JAPN 1001 Elementary Japanese (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Japanese culture. First quarter of three quarter sequence.

JAPN 1002 Elementary Japanese (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Japanese culture. Second quarter of three quarter sequence.

JAPN 1003 Elementary Japanese (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Japanese culture. Third quarter of three quarter sequence.

JAPN 1216 Popular Culture of Japan (4 Credits)
In this course we examine and analyze the emergence of particular forms of mass-produced culture, or culture for mass consumption, in Japan from the early modern period to the present. Using a variety of cultural materials enjoyed from the early modern period (1600-1868,) during which Japanese society underwent extensive urbanization, secularization, and cultural commodification, through to the present, the course focuses on overarching themes: media and information technology (woodblock printing, newspapers, and the internet); entertainment and gender (the all-male kabuki theatre and all-female Takarazuka revue); commodified romance; fiction (illustrated fiction, manga, and novels); anime and television fandom; healer-bots and cyborgs. No knowledge of Japanese required. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JAPN 1416 Postwar Japan: Changing Perspectives in Literature and Culture (4 Credits)
This course explores a range of Japanese cultural perspectives from the end of the Second World War to the present. The main focus is on the analysis and interpretation of Japanese literary texts, but during the course students also examine film, visual art, and other cultural products within a historical framework, to lead to a deeper understanding of the influences and events that have shaped both contemporary Japan and the wider world. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JAPN 1616 Samurai and Merchants: Cultures of Tokugawa Japan (4 Credits)
Introduction to the cultures of Tokugawa, Japan, focusing on the tension between the samurai and merchant classes, the images they construct of self and other, and the morals and mores of their respective worlds. As well as examining Tokugawa fiction, drama, and other cultural artifacts, this course also considers later representation of the period and of its people in twenty- and twenty-first-century text, cinema, and television to understand the importance of contemporary influences on historical representation. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JAPN 1816 Classical Japanese Literature (4 Credits)
The course covers one thousand years of Japanese writing, including a myth-history detailing the origins of Japan, the development of the rich poetic tradition, female diaries, the classic The Tale of Genji, medieval tales of wars and hermits, the nō drama, and the haiku and travel diaries. It will focus on such key binaries as orality and literacy, poetry and prose, native and foreign, popular and high-brow, and masculine and feminine. The course will also stress principles of literary analysis and interpretation. No knowledge of Japanese required. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JAPN 1992 Directed Study (1-10 Credits)

JAPN 2001 Intermediate Japanese (4 Credits)
Continuing study of complex grammatical structures, vocabulary expansion and reading skills. Prerequisite: JAPN 1003 or equivalent. First quarter of three quarter sequence.

JAPN 2002 Intermediate Japanese (4 Credits)
Continuing study of complex grammatical structures, vocabulary expansion and reading skills. Prerequisite: JAPN 1003 or equivalent. Second quarter of three quarter sequence.

JAPN 2003 Intermediate Japanese (4 Credits)
Continuing study of complex grammatical structures, vocabulary expansion and reading skills. Prerequisite: JAPN 1003 or equivalent. Third quarter of three quarter sequence.

JAPN 2100 Conversation and Composition I (4 Credits)
Intensive practice in oral skills, grammar review, reading and writing. Prerequisite: JAPN 2003 or equivalent.

JAPN 2600 Conversation & Composition II (4 Credits)
Intermediate training in speaking, reading and writing. Prerequisite: JAPN 2100 or equivalent.
JAPN 2616 Samurai and Merchants: Cultures of Tokugawa Japan (4 Credits)
Introduction to the cultures of Tokugawa, Japan, focusing on the tension between the samurai and merchant classes, the images they construct of self and other, and the morals and mores of their respective worlds. As well as examining Tokugawa fiction, drama, and other cultural artifacts, this course also considers later representation of the period and of its people in twenty- and twenty-first-century text, cinema, and television to understand the importance of contemporary influences on historical representation. This course has a Japanese reading and writing component. This course counts toward the Analytical Inquiry: Society and Culture requirement.

JAPN 2992 Directed Study (1-10 Credits)

JAPN 3100 Advanced Conversation & Composition (4 Credits)
Advanced-intermediate training in speaking, reading and writing. Prerequisite: JAPN 2600 or equivalent.

JAPN 3701 Topics in Japanese Culture (4 Credits)
Selected topics in Japanese culture. Texts and films in both Japanese and English, with a focus on modern and contemporary Japanese culture. Prerequisite: JAPN 3100 or equivalent. May be repeated for credit.

JAPN 3991 Independent Study (1-5 Credits)
JAPN 3992 Directed Study (1-10 Credits)

Latin Courses
LATN 1001 Elementary Latin (4 Credits)
Essentials of classical Latin grammar and vocabulary. Three quarter sequence.

LATN 1002 Elementary Latin (4 Credits)
Essentials of classical Latin grammar and vocabulary. Three quarter sequence.

LATN 1003 Elementary Latin (4 Credits)
Essentials of classical Latin grammar and vocabulary. Three quarter sequence.

LATN 1991 Independent Study (1-10 Credits)
LATN 1992 Directed Study (1-4 Credits)

LATN 2001 Intermediate Latin (2-4 Credits)
Close reading and translation of a major classical Roman author or genre each term. Three quarter sequence. Prerequisite: LATN 1003 or equivalent.

LATN 2002 Intermediate Latin (2-4 Credits)
Close reading and translation of a major classical Roman author or genre each term. Three quarter sequence. Prerequisite: LATN 1003 or equivalent.

LATN 2003 Intermediate Latin (2-4 Credits)
Close reading and translation of a major classical Roman author or genre each term. Three quarter sequence. Prerequisite: LATN 1003 or equivalent.

LATN 3991 Independent Study (1-5 Credits)
Prerequisite: LATN 2003 or equivalent.

Russian Courses
RUSS 1001 Elementary Russian (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Russian culture. First quarter of three quarter sequence.

RUSS 1002 Elementary Russian (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Russian culture. Second quarter of three quarter sequence. Prerequisite: RUSS 1001 or permission of instructor.

RUSS 1003 Elementary Russian (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills; introduction to Russian culture. Third quarter of three quarter sequence. Prerequisite: RUSS 1002 or permission of instructor.

RUSS 1416 Introduction to Russian Culture: Evil and the Supernatural (4 Credits)
What is evil? Where does it come from and what place does it have in our world? What, if anything, are we supposed to do about it? We examine how Russian writers wrestle with these thorny questions, and how they engage in a dialogue with the Russian folk tradition and the Orthodox church--two rich resources for thinking about and coping with evil. We read world-famous Russian classics such as Dostoevsky, Pushkin, Gogol, and Bulgakov, as well as Russian folk tales, writings produced by Russian Orthodox clergy, and recent critical studies that represent a broad range of approaches to the problem of evil. No knowledge of Russian is necessary; all class discussion, readings, and writing are in English. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RUSS 2416.
RUSS 1613 Introduction to Russian Culture and Civilization (4 Credits)
This course surveys Russia’s cultural past and present. Although it touches on aspects of Soviet culture, the main emphasis is what has been called the “real Russian Culture,” eclipsed for seventy years under the communist regime. The course surveys the various attitudes of Russian thinkers and authors towards the question of national identity and national destiny. Examples of Russian high culture (literature, art, film, music) and Russian religious faith (Orthodoxy) are discussed alongside daily life and folkloric beliefs. The course includes several significant Russian films. Knowledge of Russian language and history is not required. The course format consists of lectures, slides, video and audio presentations, as well as whole-class and small-group discussions. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RUSS 1917 Russian Revolution in Literature and History (4 Credits)
The course introduces students to the literature and history of the Russian revolution of 1917. Students examine how Russian literature helped pave the way for the revolution and how literature and film helped Russians make sense of the radical transformation of their society. Students gain insight into the reciprocal relationship of literature and politics, learning how literature shaped the revolutionary movement and how the revolution inspired new forms of artistic expression. All course materials in English translation. This course counts toward the Analytical Inquiry: Society and Culture requirement. No Prerequisites.

RUSS 1922 The Soviet Experiment in Literature and Film (4 Credits)
Architects of the Soviet experiment claimed to create a radically new type of society and person, superior to all that came before. What were the defining features and founding myths of the Soviet identity, as propagated by the government? How did this imagined identity clash with realities of life in the USSR? What cultural figures opposed the official discourse, and what artistic modes of resistance did they develop? To explore these questions, we read fiction and poetry by authors central to defining and contesting the Soviet experiment, including Maiakovski, Gladkov, Ginzburg, Pelevin, Dovlatov, and Petrushevskaya, and watch ground-breaking films by Vertov, Tarkovsky, Daneliya and others. All materials are in English. No prior knowledge of Russian literature or culture is required. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RUSS 1992 Directed Study (1-10 Credits)

RUSS 2001 Second Stage Russian (4 Credits)
Review of grammar, development of all language and cultural skills. Prerequisite: RUSS 1003 or equivalent. First quarter of two quarter sequence.

RUSS 2002 Second Stage Russian II (4 Credits)
Review of grammar, development of all language and cultural skills. Prerequisite: RUSS 2001 or equivalent. Second quarter of two quarter sequence.

RUSS 2110 Russian in a Cultural Context (4 Credits)
Continued development of Russian language and cultural skills with focus on all aspects of Russian culture, particularly Russian literature. Prerequisite: RUSS 2002 or equivalent.

RUSS 2116 Russian 19th-Century Novel: Society, Identity, and the Rise of Prose Fiction (4 Credits)
This course introduces students to classical Russian novels by world-famous authors, including Pushkin, Lermontov, Turgenev, Dostoevsky, and Tolstoy. Students develop an ability to interpret each work with a dual focus on text and context. Students deepen their appreciation of literary texts as works of art through learning to read closely and focusing on literary devices such as the narrator’s voice, plot, structure, and figurative language. Students also learn to relate novels to their historical and cultural context, the better to understand how Russian writers responded to their country’s intractable problems that included a crisis of cultural identity, the injustices of serfdom, and debates about women’s place in society. All readings in English translation. This course counts toward the Analytical Inquiry: Society and Culture requirement. No prerequisites.

RUSS 2416 Russian Classics in the Original: Evil and the Supernatural (4 Credits)
What is evil? Where does it come from and what place does it have in our world? What - if anything - are we supposed to do about it? We examine how Russian writers wrestle with these thorny questions, and how they engage in a dialogue with the Russian folk tradition and the Orthodox church - two rich resources for thinking about and coping with evil. We read world-famous Russian Classics such as Dostoevsky, Pushkin, Gogol, and Bulgakov, as well as Russian folk tales, writings produced by Russian Orthodox clergy, and recent critical studies that represent a broad range of approaches to the problem of evil. Readings and writing in Russian. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RUSS 1416. Prerequisite: RUSS 2110 or equivalent. May not be taken with or after RUSS 1416.

RUSS 2917 Russian Revolution in Literature and History (4 Credits)
The course introduces students to the literature and history of the Russian revolution of 1917. Students examine how Russian literature helped pave the way for the revolution and how literature and film helped Russians make sense of the radical transformation of their society. Students gain insight into the reciprocal relationship of literature and politics, learning how literature shaped the revolutionary movement and how the revolution inspired new forms of artistic expression. Students develop their Russian reading and writing skills. Selected readings and all essays in Russian. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: RUSS 2110 or instructor approval. May not be taken after or together with RUSS 1917.

RUSS 2992 Directed Study (1-10 Credits)

RUSS 3101 Advanced Conversation & Composition (4 Credits)
Continued improvement of Russian language skills in areas of style and syntax. Prerequisite: RUSS 2110 or equivalent. First quarter of two quarter sequence.

RUSS 3300 Short Russian Prose (4 Credits)
An advanced conversation and composition course based on Russian prose. Prerequisite: RUSS 3101 or equivalent, or permission of instructor.

RUSS 3500 Structure of Russian (4 Credits)
Linguistic study of how Russian vocabulary building and Russian grammar operate. Prerequisite: RUSS 3101 or equivalent, or permission of instructor.
RUSS 3650 Soviet and Post Soviet Cinema (4 Credits)
Film course concentrating on the works of Andrei Tarkovskii. Open to non-Russian speaking students. Prerequisite: RUSS 3500 or equivalent, or permission of instructor.

RUSS 3701 Topics in Russian Literature (4 Credits)
Selected topics, authors and movements in medieval, Russian, Soviet and post-Soviet literature. May be repeated for credit. Prerequisite: RUSS 3500 or equivalent, or permission of instructor.

RUSS 3850 Working with Russian Media (4 Credits)
Multimedia course emphasizing new media in Russian culture and society. Prerequisite: RUSS 3500 or equivalent, or permission of instructor.

RUSS 3991 Independent Study (1-5 Credits)

RUSS 3992 Directed Study (1-10 Credits)

RUSS 3995 Independent Research (1-5 Credits)

RUSS 3997 Russian: Learn Through Service (1-5 Credits)
Internship and/or service learning for credit with local organizations in the Russian-speaking community. Must be approved by both Russian faculty and organization participating.

RUSS 3998 Honors Thesis (1-4 Credits)

Spanish Courses

SPAN 1001 Beginning Spanish (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills. Three quarter sequence.

SPAN 1002 Beginning Spanish (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills. Three quarter sequence.

SPAN 1003 Beginning Spanish (4 Credits)
Basic grammar, syntax and vocabulary; emphasis on oral skills. Three quarter sequence.

SPAN 1500 Understanding Contemporary Spain (4 Credits)
This course examines the key political, social and cultural issues at play in contemporary Spanish society. Via the analysis of various texts —historical, sociological, literary, filmic—this course will familiarize students with the key issues that define Spanish society today. The themes that will be the primary focus of class discussions and assignments include national vs. regional identities, gender roles, multiculturalism, Spain and the European Union and the legacy of the Franco dictatorship. Students will also read short stories by contemporary Spanish authors that address these same themes in order to have the opportunity to analyze and interpret artistic representations of the key issues at play in Spanish society today. This course counts toward the Analytical Inquiry: Society and Culture requirement.

SPAN 1992 Directed Study (1-10 Credits)

SPAN 2001 Intermediate Spanish (4 Credits)
Grammatical structures, close rapid conversation, reading of cultural and literary materials. Prerequisite: SPAN 1003 or equivalent. Three quarter sequence.

SPAN 2002 Intermediate Spanish (4 Credits)
Grammatical structures, close rapid conversation, reading of cultural and literary materials. Prerequisite: SPAN 1003 or equivalent. Three quarter sequence.

SPAN 2003 Intermediate Spanish (4 Credits)
Grammatical structures, close rapid conversation, reading of cultural and literary materials. Prerequisite: SPAN 1003 or equivalent. Three quarter sequence.

SPAN 2100 Conversation and Composition (4 Credits)
Intensive practice in written and oral skills, grammar review, and introduction to Spanish thought and cultural patterns. Prerequisite: SPAN 2003 or equivalent.

SPAN 2300 Iberian Culture & Civilization (4 Credits)
Intensive study of culture of Spain; manifestations of culture found in history, art, architecture, music, literature, and politics of early and modern Spain. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: SPAN 2100 or equivalent.

SPAN 2350 Latin American Culture and Societies (4 Credits)
An introductory and interdisciplinary course on the political, historical, and cultural dynamics that have shaped Latin America, the Caribbean and U.S. Latinos. An examination of the political and intellectual movements and economic forces embedded in relations of power from pre-Colombian civilizations, colonialism, independence, nation building, and imperialism to the struggle for democracy. Analysis of diverse cultural practices such as literature, music, film, and visual art within a national and transnational context. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: SPAN 2100 or equivalent.
SPAN 2400 Latino Cultures in the United States (4 Credits)
Interdisciplinary study of Latino contemporary issues in the United States incorporating aspects of the distinct socio-historical, political, economic, and cultural dynamics that have contributed to the shaping, development and increasing prominence of Latino communities. Includes an examination of how Latino cultural forms and practices intersect with socio-historical, economic, and political forces as a framework for understanding the Mexicano/Chicano, Puerto Rican, Cuban, Dominican and other Latino communities embedded in the very fabric of what constitutes the United States. This course counts toward the Analytical Inquiry: Society and Culture requirement. Prerequisite: SPAN 2350 or equivalent.

SPAN 2992 Directed Study (1-10 Credits)

SPAN 3010 Latino Presence in the United States (4 Credits)
An interdisciplinary survey about Mexican Americans (Chicanos) from 1845 to the present. Lectures, readings and discussions provide an overview of influences that continue to shape the culture, character, history, and literature of Chicanos in the United States. A major focus is an exploration of the various ways in which Chicanos have struggled to achieve social change and equality. Culture, ethnicity, language, education, immigration, economics, political action, oppression and discrimination, and current events are also included through readings of representative works including narrative, poetry, theater, and essay. Prerequisite: SPAN 2350 or 2400 or equivalent.

SPAN 3110 Critical View of Latin America through Film (4 Credits)
This course is designed from an analytical perspective to provide a cultural and historical overview of Latin America. The class begins with feature films and documentaries that focus on the Conquest, exploration and colonization, and continues with contemporary issues of cultural, socio-economic, and philosophical relevance. Analytical focus on indigenous issues, religion, race relations, women’s issues, economic and socio-political concerns as students develop a more complete appreciation of the complex world which is Latin America. Prerequisite: SPAN 2350 or equivalent.

SPAN 3120 Mexican Film: Historical and Cultural Representation (4 Credits)
A critical perspective on Mexican reality by examining the role of cinema as a means of cultural, historical, ideological, economic and/or political expression. The focus is on Mexican film production in relation to three important periods: the Silent Cinema, the Golden Age in Mexican film, and the Contemporary Era or “new cinema” movement. In addition to feature films, documentaries connect the evolution of Mexican cinema with specific historical and cultural periods. Prerequisite: SPAN 2350 or equivalent.

SPAN 3200 Eroticism and Nation in the Latin American Novel (4 Credits)
A study of the foundational fictions of Latin America and their twentieth-century rewriting. Nineteenth-century novels showcasing the interplay of sentimental love, eroticism, class struggle, and political agendas in the formative years of the Latin American nations are analyzed and contrasted with twentieth-century narratives where such nation (and narrative) building is put to question. Prerequisite: SPAN 2350 or equivalent.

SPAN 3230 Musicalized Literature (4 Credits)
Introduction to musicalized literature: a study of literary texts that provoke in the reader a sense of being related to music or prompt a “musical” experience while reading. The course focuses on various Latin American narrative texts whose relation with songs or genres of popular music is more or less explicit. The analysis aims first to illuminate their musical aspects, but also addresses other angles (social, historical, political). Basic information about several genres of popular music is provided in order to facilitate comprehension. Prerequisite: SPAN 2350 or equivalent.

SPAN 3250 Latin America Since the Conquest (4 Credits)
An exploration of literary strategies in relation to power and domination rooted in the conquest of Latin America through the present. The focal point is the shaping of a vertical power structure by colonial and postcolonial powers such as Spain, England, France and the United States. The course examines the function of literature in sustaining as well as resisting violence, economic exploitation, identity, and the denial of humanity. Prerequisite: SPAN 2350 or equivalent.

SPAN 3260 Creative Writing in Spanish (4 Credits)
Writing means the production of thoughts and the elaboration of perspectives that enable the writer to construct and deconstruct reality. It is working conscientiously and methodically with language to expand the boundaries of knowledge in imaginative ways through a subjective and critical perspective. This course explores these notions through theory, textual analysis, and practice. It combines literary readings of Latino/a and Latin American writers with compositional theory and literary criticism. The student will understand the creative writing process and what makes a piece successful. Prerequisite: at least one 3000 level course or equivalent.

SPAN 3290 Literature and Human Rights in Latin America (4 Credits)
An analysis of human rights literature from the 16th century to the present within a historical, national and transnational context. A critical perspective on power in relation to political memory, collective violence, the diasporic experience, authoritarianism, official cultural discourses, consequences of globalization and social transformation, among other contested spaces. An exploration of colonial and neocolonial legacy and a testimony of the violence experienced by women, indigenous and other ethnic communities, and immigrants, among others, in areas such as Argentina, Chile, Mexico, Central America, and the United States. Prerequisite: SPAN 2350 or equivalent.

SPAN 3300 Travel Narratives (4 Credits)
Travel accounts, rather than candid and unbiased testimonies about places and people, are challenging texts that require critical analysis. This class offers an overview of the evolution of travel narratives, from the times of the Grand Tour to contemporary accounts representing cross-cultural interactions between Spaniards and their ‘others’. Travelogues by authors such as Washington Irving, Domingo Faustino Sarmiento, Julio Camba and Juan Goytisolo. Prerequisite: SPAN 2300 or equivalent.

SPAN 3310 Pity and Eroticism in Spain (4 Credits)
Cultural manifestations such as mysticism and eroticism often appearing side-by-side in early Spanish culture, art, literature, sculpture, etc.; wide use of cancioneros or early song-poetry books and manuscripts. Prerequisite: SPAN 2300 or equivalent.
SPAN 3320 Class and Gender in 19th-Century Spain (4 Credits)
Spain underwent social and political revolutions during the nineteenth century from which new values emerged. Through the analysis of literary, political, and cultural texts from the late nineteenth-century, students explore the changed view of gender and class identity. Students will read and critically examine several works by prominent authors of the Spanish Realist tradition, including Benito Pérez Galdós, Leopoldo Alas (Clarín) and Emilia Pardo Bazán. Prerequisite: SPAN 2300 or equivalent.

SPAN 3330 Rebels, Lovers and Outlaws in Spanish Romanticism (4 Credits)
This course studies the literary and cultural tropes of Spanish Romanticism. Themes discussed include the rebellion against an unjust social order, the portrayal of marginal social groups and the creation of subjectivity in the Spanish Romantic tradition. The literary genres studied are drama, essay and poetry; the primary authors include Larra, Zorrilla, Espronceda, Bécquer, and de Castro. Prerequisite: SPAN 2300 or equivalent.

SPAN 3333 The Fertile Friendship: Bunuel, Lorca, Dali and Spanish Surrealism (4 Credits)
An interdisciplinary study of the relationships of three Spanish artists (Salvador Dalí, Federico García Lorca and Luis Buñuel) and the development of Surrealism in Spain. Through the intriguing intersections of the life and art of the painter, the poet, and the filmmaker, a better understanding of this fascinating artistic movement is achieved. Prerequisite: SPAN 2300 or equivalent.

SPAN 3400 Spanish Theatre in Performance (4 Credits)
Reading, discussion and performance of plays written in Spanish. The focus will be on improving pronunciation, intonation and dramatic expression as well as providing a better understanding of contemporary theatrical movements in the Spanish speaking world such as teatro del absurdo, teatro posibilista or teatro campesino. The course includes a final performance (in front of a real audience) of the play. Plays by authors such as Susana Torres Molina (argentine), Federico García Lorca (Spain), Emilio Carballido (Mexico), and other authors from the Spanish speaking world. No prior experience in theater is required. Prerequisite: SPAN 2300 or SPAN 2350 or equivalent.

SPAN 3410 Death and Dying in the Medieval, Renaissance & Golden Age (4 Credits)
Attitudes regarding human mortality; presentation and analysis of these attitudes in literature, the arts, historical, philosophical, social and theological sources; classroom discussions complemented by selected readings and media presentations. Prerequisite: SPAN 2300 or equivalent.

SPAN 3420 Contemporary Film in Spain (4 Credits)
Through contemporary Spanish film and essays this course examines the representation of key cultural aspects of Spanish society, such as national and regional identities, immigration, and gender issues. Students critically evaluate the causes, cultural manifestations and consequences of the social themes studied first by reading about them and then by viewing films that consider the same issues. They learn to identify the formal elements of film and develop a critical vocabulary with which they analyze and write about them. Prerequisite: SPAN 2300 or equivalent.

SPAN 3425 Transgressing Borders: Latina Writers in the United States (4 Credits)
An introduction to the written and oral tradition of Latina writers of Mexican heritage in the United States from the 19th century to the present. The course reflects on how Latinas position themselves, and are positioned within the context of history, culture, and society. It includes an exploration of identity construction and transgression, literary and cultural myths, icons, and archetypes, and the geopolitical and symbolic space of writing. Prerequisite: SPAN 2350 or SPAN 2400 or equivalent.

SPAN 3430 The Fantastic Short Story in Latin America (4 Credits)
Introduction to the genre of the fantastic short story in nineteenth- and twentieth-century Latin American literature. Study of the rise of the short story genre in Latin America and the ways in which we can understand the Fantastic and its relationship to the Gothic and the Magical Real. Assigned readings by authors such as Horacio Quiroga, Jorge Luis Borges, Julio Cortazar, Gabriel Garcia Marquez, Carlos Fuentes, Silvina Ocampo and Rosario Ferre. Class discussions, theoretical texts and student analyses focus on a text's themes, literary devices, and writing styles, as well as metatextual and historical references. Prerequisite: SPAN 2350 or equivalent.

SPAN 3435 Exploring the Amazon: A Literary, Filmic and Ethnographic Journey (4 Credits)
Introduces the student to the Amazonian region of South America and the ways in which this fascinating landscape and the diverse peoples who inhabit it have been portrayed and exploited by “outsider” novelists, filmmakers, explorers, anthropologists, businessmen, and scientists beginning in the sixteenth century. This course also includes a survey of texts selected from the oral traditions of indigenous Amazonian groups such as the Ashaninka, Machiguenga, Cashinahua and Ese’eja. Assigned readings underscore the course’s interdisciplinary focus and encourage students to hone their course reading and analytical writing skills through the study of anthropological, historical, literary and filmic texts. Prerequisite: SPAN 2350 or equivalent.
Leadership Studies Program

Office: Driscoll Student Center South, Suite 13
Mail Code: 2050 E. Evans Ave. Denver, CO 80208
Phone: 303.871.2462
Email: applyplp@du.edu
Web Site: http://www.du.edu/leadership

Leadership Studies

Minor Requirements

The minor requires 24 credits. In addition, students must complete a total of 80 service hours.

First year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDRS 2017</td>
<td>The Leadership Process</td>
<td>1,2</td>
</tr>
<tr>
<td>LDRS 2018</td>
<td>Self as a Leader</td>
<td>1,2</td>
</tr>
<tr>
<td>LDRS 2019</td>
<td>Leading Teams</td>
<td>1,2</td>
</tr>
<tr>
<td></td>
<td><strong>40 service hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

Second year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDRS 2040</td>
<td>Leading Community Change</td>
<td>4</td>
</tr>
<tr>
<td>LDRS 2050</td>
<td>Collaborative Leadership: Local Perspectives</td>
<td>2</td>
</tr>
<tr>
<td>LDRS 2060</td>
<td>Collaborative Leadership: Global Perspectives</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>40 service hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

Third and/or fourth year

SPAN 3680 Food, Power and Identity in Latin American Literatures and Cultures (4 Credits)
A study of culinary representations and the role of food in Latin American literature, film, culture and politics. Assigned texts include short stories, novels, films and a selection of literary, historical and political essays that relate to food politics and poetics. A review of key food policies and politics throughout colonial and contemporary Latin America reveal legacies of colonial power struggles, as well as the important intersections between food and constructions of identity, nationality, and socioeconomic and cultural emancipation. The course also explores themes such as the art of cooking as a tool for seduction, culinary witchcraft, and contemporary national and regional struggles to achieve food sovereignty in an era of globalization and neoliberal politics. Prerequisite: SPAN 2350 or equivalent.

SPAN 3702 Topics in Spanish (4 Credits)
Selected topics, genres, authors and/or literary, cultural, sociopolitical, or historical movements in the Spanish-speaking world. Course with same number but with a different topic may be repeated for credit. Prerequisite: at least one of SPAN 2300, SPAN 2350 or equivalent.

SPAN 3990 Senior Seminar (4 Credits)
This is the capstone course of the Spanish major and requires students to complete an in depth, scholarly study of a topic or issue pertinent to their seminar’s central theme(s). Spanish majors must take a minimum of one senior seminar and this course must be taken at DU once a student has reached senior standing. Prerequisites: SPAN 2300, SPAN 2350 (or equivalent) and at least twelve credits at the 3000 level. A selection of seminar topics includes Latin American Popular Culture, Contemporary Spanish Novel, Pre-Columbian and Colonial Andean Literature and Culture, Puerto Rican Literature and Society, Layqas, Nakas and Saqras: Representations of the ‘Supernatural’ in Quechua Oral Traditions, Latin American Narrative, El Romancero, Contemporary Socio-Political Poetry in Latin America, Latin American Women Poets, and Masterpieces of Latin American Literature.
LDRS 3000  Capstone: Leadership Ethics  4
6 credits at the 2000 level or above 1  6
Total Credits  24

1 Additional credits can come from a combination of elective courses, internships and/or independent study. These credits must be approved by the program director.

Courses

LDRS 2017 The Leadership Process (1.2 Credit)
In this academic entree to the study of leadership, we explore the fundamental nature of leadership and how to develop as students of leadership. This course encourages students to discover their values, preferences, risk-taking propensity and other characteristics as these relate to their leadership potential. Students integrate learning in a Personal Leadership Statement, declaring what they stand for as a leader. We explore the idea of "community" and our obligations to take on a leadership role in the community with whom we identify. Service as an act of leadership will be expected both as a course requirement and overall program requirement in the Pioneer Leadership Program. Prerequisite: membership in the Pioneer Leadership Program (PLP), or permission of PLP faculty.

LDRS 2050 Collaborative Leadership: Local Perspectives (2 Credits)
In this two-course sequence, students have a chance to lead and implement a model of community based change involving service that was envisioned in COMN 2040. The sequence represents an important step in the Pioneer Leadership Program experience and in the student's development as a citizen leader. By the end of this sequence, the student should be able to lead community based change efforts and learn from the experiences associated with those efforts. Prerequisites: LDRS 2017 and membership in the Pioneer Leadership Program (PLP), or permission of PLP faculty.

LDRS 2040 Leading Community Change (4 Credits)
This course continues themes of the first-year Pioneer Leadership Program (PLP) sequence. Specifically, the course provides theoretical and applied concepts on effective change within a community while, at the same time, teaching students how to engage in transformational service within communities. Prerequisites: LDRS 2017, LDRS 2018, LDRS 2019 and membership in the Pioneer Leadership Program (PLP), or permission of the PLP faculty.

LDRS 2060 Collaborative Leadership: Global Perspectives (2 Credits)
In this two-course sequence, students have a chance to lead and implement a model of community based change involving service that was envisioned in COMN 2040. The sequence represents an important step in the Pioneer Leadership Program experience and in the student's development as a citizen leader. By the end of this sequence, the student should be able to lead community based change efforts and learn from the experiences associated with those efforts. Prerequisites: LDRS 2050 and PLP membership or PLP approval.

LDRS 2300 Transformational Leadership (4 Credits)
This course focuses on an introduction to leadership theory and integration of this theory into the student's leadership development and service in all sectors. This class is designed to develop a particular understanding of citizen leadership as an avenue to create change and transformation of communities. Additionally, students gain a greater awareness of their own leadership style, develop a stronger appreciation for teamwork and create goals for leadership in their own context. We examine personal leadership development through three main lenses. First, students gain a better understanding of the contextual demands for leadership. The second focus entails conducting self-exploration of one's own leadership style through identifying values, personality, and strengths and weaknesses as a leader. Finally, the course includes developing a greater awareness of how one relates to others and engages in transformative change.

LDRS 2310 Leadership in a Virtual World (4 Credits)
Distributed organizations are commonplace in the high-tech world in which we now find ourselves living and working. Leading in private and public settings requires a developed set of skills to utilize the virtual environment to advance a shared goal. Technical skills and communication take on new importance for leading virtually. This course focuses on these new realities of today's work and community environments. Through readings of current research on virtual work and team leadership as well as online assignments to recognize, practice and develop needed skills, students gain a strong foundational understanding of what constitutes effectiveness in virtual work and community leadership.
LDRS 2320 Presidential Leadership (4 Credits)
The University of Denver had the privilege to host the first 2012 Presidential Debate in October. With all of the attention this brings to campus, it is appropriate to examine the role of a president as a leader and the process of becoming president. What does it take to be a successful U.S. president? What characteristics and behaviors are more commonly found in effective presidential leadership? How do campaigns and parties frame the success or failure of presidential candidates? How can the average citizen understand the role of this leadership position and become informed on the leadership capacity of various candidates to fill that role effectively? This course examines the extensive research and theorizing about presidential leadership and their success factors. Various approaches to studying the leadership of presidents are utilized including case studies, memoirs, research projects, and guest speakers. Guests include past presidential candidates, campaign managers, speechwriters and party officials from all sides. A variety of readings are selected to inform and frame this discussion-intense course. The goal is to review the literature and a number of varied approaches to understand presidential leadership with a focus on the role of the president as chief leader of our nation.

LDRS 2400 Ldrshp & Sustnblty in Belize (4 Credits)
Every day, decisions are made by leaders in business, government, and non-profit settings that impact sustainability in its many forms. This course explores multiple meanings and interpretations of sustainability. The course location of Belize provides a perfect learning laboratory to examine how one country is attempting to balance the sometimes competing demands of economic, cultural, and environmental sustainability. Course activities include staying at a low-environmental impact conference center in the rainforest, visiting a model environmentally sustainable island community, hearing guest lectures from various country experts, and exploring Mayan ruins. Through these activities students examine the role that leadership plays in contributing to small and large scale sustainability efforts. Students must apply and receive instructor permission to register for this course.

LDRS 2410 Global Leadership: A Yucatan Experience (4 Credits)
Developing the capacity to work and lead in a global environment has never been more important for university graduates. Strong personal awareness, coupled with mature intercultural competencies and knowledge, is required of any graduate hoping to take a meaningful role in a globalizing world. This course is designed to couple intercultural awareness with critical principles for global leadership effectiveness in a unique cross-cultural environment: Yucatan, Mexico. Using Merida as a base camp, this class focuses on the challenges of leading in a region with a strong colonial past, a proud Mayan culture influencing the present, and globalization that attracts many foreign interests through tourism and natural resource development. Through a unique partnership with Project C.U.R.E., a non-profit organization dedicated to building sustainable healthcare infrastructure, students hear and see the work of an international non-profit dedicated to building strong healthy communities. In addition, students learn from leaders within the government and business community, examining local and regional issues that challenge and must be understood to create vibrant sustainable communities. Course activities include lectures from local and international leaders, organizational and cultural site visits, intercultural and leadership assessments, and a hospital work project service opportunity. Days are filled with experiential learning and evenings are set aside for group and personal reflections. Required pre-course reading helps all begin with a common language of leadership principles, globalization understanding and awareness of pertinent challenges facing the Yucatan region.

LDRS 2510 Outdoor Leadership: Developing Leaders in Colorado’s Backcountry (4 Credits)
This experiential-based leadership course is designed to engage the student learner in the theory and practice of adventure education as it applies to leadership development for university students. The course includes three hours of pre-trip planning. The expedition portion of the course is eight full days with seven days of backpacking in the Raggeds Wilderness Area, which spans the White River and Gunnison National Forest. The proposed course is 44 miles round trip and includes two high altitude mountain passes and an opportunity for a peak attempt on Treasury Mountain. The course area is located between Paonia and Crested Butte, Colorado. With the support of professional instructor facilitators, students follow a traditional outdoor leadership course progression that allows them to practice and improve their leadership skills. This includes group management, navigation, lesson planning, outdoor ethics and Leave No Trace philosophy, risk management, facilitation, group processing and transfer of learning. The pinnacle of the course includes a professionally facilitated overnight solo, peak attempt and completion of the outdoor leadership competencies included in the curriculum.

LDRS 3000 Capstone: Leadership Ethics (4 Credits)
This course completes leadership studies as an undergraduate at DU, and the process is designed to help students think in a structured, reflective way about the ethical considerations surrounding leadership acts and consequences. As a result, students should leave with a greater understanding of your own and others’ leadership, as well as with tools to help students navigate ambiguous situations and conflicting interests associated with their future leadership roles. Prerequisites: LDRS 2017, LDRS 2018, LDRS 2019, LDRS 2040, LDRS 2050, and LDRS 2060.

LDRS 3980 Internship (1-7 Credits)
The PLP Internship program provides individualized opportunities to gain valuable professional experience and build leadership skills. This hands-on program complements a student’s academic major or a specified interest area that supports the student's leadership development through careful placement in community based learning. All three sectors of government, not-for-profit and private enterprise are available for internship learning opportunities.

LDRS 3991 Independent Study (1-5 Credits)
LDRS 3992 Directed Study (1-5 Credits)

Department of Business Ethics and Legal Studies

Office: Daniels College of Business, Suite 687
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-3213
Email: kyla.harrison@du.edu
Today's managers, professionals and entrepreneurs operate in a complex legal environment that affects all facets of an organization. Firms need business graduates with knowledge of the legal and regulatory climate for jobs in human resources, marketing, purchasing and environmental affairs. Business and trade associations depend on staff members who monitor legislative and judicial decisions. A Legal Studies minor provides a foundation for careers in the public or private sector.

**Legal Studies**

**Minor Requirements**

The Legal Studies minor is available only to students pursuing a major in the Daniels College of Business.

16 credits, including:

**Legal Studies Course**

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGST 2560</td>
<td>The Constitution &amp; Business</td>
</tr>
<tr>
<td>LGST 2570</td>
<td>Contracts for Business</td>
</tr>
<tr>
<td>LGST 2960</td>
<td>Employment Law &amp; Ethics</td>
</tr>
<tr>
<td>LGST 3100</td>
<td>Business Ethics &amp; Social Responsibility</td>
</tr>
<tr>
<td>LGST 3700</td>
<td>International Business Law</td>
</tr>
</tbody>
</table>

**Additional Coursework**

Select three additional courses from either Legal Studies or from the list below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJS 3040</td>
<td>Media Law</td>
</tr>
<tr>
<td>PHIL 2180</td>
<td>Ethics</td>
</tr>
<tr>
<td>PLSC 2820</td>
<td>Civil Rights and Liberties</td>
</tr>
<tr>
<td>PLSC 2830</td>
<td>Law and Social Policy</td>
</tr>
<tr>
<td>PLSC 2860</td>
<td>Constitutional Law &amp; Politics</td>
</tr>
<tr>
<td>PLSC 2880</td>
<td>Taming Tyranny: How Constitutions Frame Freedom</td>
</tr>
<tr>
<td>PPOL 2802</td>
<td>Supreme Court &amp; Public Policy</td>
</tr>
<tr>
<td>SOCI 2250</td>
<td>Criminology</td>
</tr>
<tr>
<td>SOCI 2750</td>
<td>Sociology of Law</td>
</tr>
<tr>
<td>SOCI 2770</td>
<td>Kids and Courts</td>
</tr>
<tr>
<td>SOCI 2785</td>
<td>Family and the Law</td>
</tr>
</tbody>
</table>

**Total Credits**

16

**Courses**

**LGST 1992 Directed Study (1-4 Credits)**

**LGST 2000 Foundations of Business Law (4 Credits)**
Managerial perspective on the role of law and its relationship to business environment; emphasis on American legal system (history of law, courts and civil procedure), private law (business torts, contracts, corporate responsibilities and business ethics), and governmental intervention (constitutional law, employment law, white collar criminal law and corporate/securities law). Prerequisites: BUS 1000 and sophomore standing.

**LGST 2560 The Constitution & Business (4 Credits)**
Current real world issues are analyzed in the exploration of constitutional law as it relates to business and free enterprise. Prerequisites: LGST 2000.

**LGST 2570 Contracts for Business (4 Credits)**
This course includes a comprehensive discussion of major contractual topics--including drafting and negotiation - and how they relate to legal and ethical elements of business. Prerequisites: LGST 2000.

**LGST 2960 Employment Law & Ethics (4 Credits)**
Designed to offer insight into important employment law issues including employment-at-will, employees privacy rights, employment discrimination and labor law. Prerequisites: LGST 2000.
LGST 2992 Directed Study (1-4 Credits)

LGST 3100 Business Ethics & Social Responsibility (4 Credits)
The purpose of this course is to introduce students to ethical concepts, theories and issues as they relate to business and managerial decision making. A primary focus is specific issues related to business and managerial decision making, including topics such as employee privacy, sales responsibility, sexual harassment, discrimination, intellectual property, whistle blowing, and career/family conflicts. The course is also designed to introduce students to more general approaches or ways of thinking about ethics, and students grapple with some of the basic and fundamental problems of ethics. Cross listed with MGMT 3100. Prerequisites: LGST 2000 and degree checkpoint 2.

LGST 3550 Topics in Business Law II (4 Credits)
Law relating to general and limited partnerships, corporations, property, securities law, professional responsibilities and related studies. Accounting students only. Prerequisites: LGST 2000.

LGST 3700 International Business Law (4 Credits)
Introduction to public international law (rights and duties of states and intergovernmental organizations) and to private international law (rights and duties of individuals, businesses and nongovernmental organizations) in international affairs. Key issues include alternative dispute resolution (ADR), privatization, intellectual property, international sales, the Foreign Corrupt Practices Act, trade (GATT and WTO), and the international facilities that deal with the adjudication and resolution of business and legal issues. Prerequisites: LGST 2000 and degree checkpoint 2.

LGST 3701 Topics in Legal Studies (1-4 Credits)
Exploration of various topics and issues related to business ethics and legal studies. Prerequisites: LGST 2000, degree checkpoint 2 and instructor permission.

LGST 3710 E-Commerce Law and Ethics (4 Credits)
Over the past 20 years, changes in technology have been dramatic and far-reaching, and navigating the future will continually challenge the business professional. This course examines the legal and ethical dimensions of online privacy, security, marketing, contracts and intellectual property. Prerequisites: LGST 2000 and degree checkpoint 2.

LGST 3730 Values Based Leadership in Practice (4 Credits)
This course is a practical focus on leadership culture through analysis of real leaders applying theory to their personal experiences and practice. The course utilizes speakers in the Voices of Experience Speaker Series and outstanding literature to facilitate discussion. The course is offered in two-credit-hour sequences over two quarters. Prerequisites: LGST 2000 and degree checkpoint 2.

LGST 3790 Entrepreneur & Family Business (4 Credits)
This course covers (1) how an individual starts a business, (2) what you must know to get a new business off the ground and moving towards success, (3) the most current issues involving the creation of value, (4) strengthening and growing family businesses through the process of adopting best practices in governance, coupled with ethical conduct, value based leadership and legal compliance. The students are moved along tracks from which they can both observe and absorb a means to insure success and longevity in operating an individually owned or family owned business. Cross listed with LGST 4790. Prerequisites: LGST 2000 and degree checkpoint 2.

LGST 3980 Internship (1-5 Credits)

LGST 3991 Independent Study (1-8 Credits)
Independent research/study; requires written report. Prerequisite: instructor's permission.

LGST 3992 Directed Study (1-4 Credits)

Department of Management

Office: Daniels College of Business, Suite 455
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-2489
Web Site: http://daniels.du.edu/academic-programs/undergraduate/majors-minors/management/

The management major at DU focuses on people—the most important resource in business. Students may study such areas as human resource management, organizational behavior, labor relations, ethics, international management, planning and control, and problem identification and diagnosis. Graduates of the program go on to earn graduate degrees at DU and other highly respected schools around the country. Career opportunities exist in labor relations, general supervision and management, personnel/human resource management, management of family businesses and entrepreneurial endeavors.

General Business

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 36 credits; maximum of 45 credits. Requirements include:

Accounting or Business Information & Analytics: One Course
Economics or Legal Studies: One Course  4
Finance: Two Courses  8
Management: Three Courses  12
Marketing: Two Courses  8
Total Credits  36

1 Internship or Independent Study credit cannot be applied toward General Business major requirements.

International Business

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 36 credits; maximum of 45 credits. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTS 1500</td>
<td>Contemporary Issues in the Global Economy</td>
<td>4</td>
</tr>
<tr>
<td>INTS 1700</td>
<td>Introduction to International Politics</td>
<td>4</td>
</tr>
<tr>
<td>INTS 2370</td>
<td>Global Political Economy</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>International Economics</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2420</td>
<td>International Management</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 3630</td>
<td>International Marketing</td>
<td>4</td>
</tr>
<tr>
<td>FIN 3410</td>
<td>Multinational Financial Management</td>
<td>4</td>
</tr>
<tr>
<td>LGST 3700</td>
<td>International Business Law</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective
One 3000-level International Studies course or one pre-approved business course.  4
Total Credits  36

Management

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 32 credits; maximum of 45 credits. Requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 2020</td>
<td>Problem Analysis &amp; Systems Design</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2040</td>
<td>Managing Human Resources</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2420</td>
<td>International Management</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 3280</td>
<td>Business Plan</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives
Select four Management electives.  16
Total Credits  32

Minor Requirements

The Management minor is available only to students pursuing a major in the Daniels College of Business.

16 credits, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 2020</td>
<td>Problem Analysis &amp; Systems Design</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2040</td>
<td>Managing Human Resources</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 3280</td>
<td>Business Plan</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective
Select one Management elective.  4
Total Credits  16
Courses

MGMT 2020 Problem Analysis & Systems Design (4 Credits)
General systems approaches and problem analysis frameworks used to identify, explain and solve organizational problems; emphasis on critical thinking and creative solutions. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 2040 Managing Human Resources (4 Credits)
This course focuses on the administration of human resources, including the processes of personnel management and personnel systems in complex organizations, both public and private. Techniques for recruiting and staffing; orienting, training and development; motivation, performance management, employee relations, compensation systems, and reward and retention systems; and safety and health issues will be addressed. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 2100 Management and Organizational Behavior (4 Credits)
This course is students' first introduction to the human side of organizations. Its theme is leading people and organizations for high performance in changing times. It includes management topics such as planning, control and decision making, and traditional organizational behavior topics such as motivation, communication, leadership, conflict management, teams and organizational design and culture. Ethical issues for managers are identified and studied; the global context of business is emphasized as a central factor in leading organizations; and the course includes integrating themes of sustainability, engagement, and inclusion — creating organizations that are sustainable, that attract and engage talented people, and that exemplify inclusive excellence. Critical and analytical thinking skills are developed and reinforced throughout the course. Prerequisites: Degree checkpoint 1. Note: Not open to students who have completed MGMT 2150.

MGMT 2420 International Management (4 Credits)
Introduction to multinational corporations and management of international profit and non-profit organizations; how management theory and practice are impacted by particular cultural contexts; analysis of current issues related to international trade and investments, and problems and opportunities of multinational operations. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 2700 Topics in Management (1-4 Credits)
Consideration and in-depth analysis of current issues in the field of management. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 2850 Business and Society (4 Credits)
Public Policy and Business is the core course designed to familiarize students with the relationships among the private, public and nonprofit sectors. It acquaints students with the broad range of issues and the various methods and processes used to resolve issues and solve problems faced by stakeholders in these various sectors in these turbulent times. Managerial, entrepreneurial, and governmental approaches to address and resolve business and public policy issues and problems in our dynamic environment are explored and analyzed. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3010 Developing a Business Plan (4 Credits)
This is the culminating course for the business minor. It integrates the various functional areas (e.g., business law, management, accounting, marketing, and finance) with environmental scanning, competitive strategy, market feasibility, and innovation. Students study various business models through case studies, learning what leads to business success and failure. Students also learn about the business planning process, from start to finish, and develop an actual business plan for either a new, entrepreneurial venture or an established business. Prerequisites: BUS 1000, LGST 2000, ACTG 2010, FIN 2010, and MKTG 2010. For Business minors only.

MGMT 3100 Business Ethics and Social Responsibility (4 Credits)
This course introduces students to ethical concepts, theories and issues as they relate to business and managerial decision making, including the social responsibilities of business. Case studies, group projects and lecture format. Cross listed with LGST 3100. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3200 Employee Relations (4 Credits)
This course provides a practical and orderly perspective on how to create an effective employer/employee relationship. Students learn the components and factors that promote and destroy effective employee relations. We learn the evolution of the labor movement in the United States and its influence on the business workplace. We learn techniques that can be used in fostering effective employee relations and learn about the challenges that face management. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3270 Dispute Resolution (4 Credits)
Various dispute resolution techniques in business contexts as developed through case studies. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3280 Business Plan (4 Credits)
This course integrates the practical functional areas of industry and competitive analysis, finance, accounting, information technology, marketing, legal studies, operations management, general management, corporate social responsibility and exit strategy issues, culminating in the development of an entrepreneurial business plan. Careful attention to environmental and industry issues that impact new venture startup, as well as market potential and funding sources, are critical to planning and launching a new business. Junior standing required. Prerequisites: Degree checkpoint 2.

MGMT 3700 Stress Management (1-8 Credits)
Exploration of various topics and issues related to management. Prerequisites: Degree checkpoint 2 and MGMT 2100.
MGMT 3710 Business Process Management (4 Credits)
Change is one of the foremost, if not the most important business topic today. To address these rapidly changing critical organizational, management, and technology issues, Business Process Management, Modeling and Analysis has become the preeminent innovative business performance technique over the past five years. This course helps all individuals to understand better Business Process Management, Modeling and Analysis by gaining insights into business process management concepts and principles, the use of process change enablers, a structured business process management methodology, business process management tools and techniques, change management and why organizations fail or succeed in implementing Business Process Management, Modeling and Analysis, highlighting five critical success factors. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3720 Knowledge Management (4 Credits)
To become more innovative, responsive to customers and suppliers and adaptable to change, leading organizations are learning how to learn from high numbers of knowledgeable people. This course helps all individuals to understand Knowledge Management by gaining insights into knowledge management concepts and principles, the use of knowledge management enablers, a structured methodology and framework for knowledge management, tools and techniques for knowledge management, effective change management programs for implementing knowledge management, and why organizations fail or succeed in implementing knowledge management, highlighting five critical success factors. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3730 Nongovernmental Organizations and Business (4 Credits)
Nongovernmental Organizations (NGOs), with increasing credibility and authority, have a measurable impact on the intersection of business, government and society. NGOs are defined broadly as nonstate, nonprofit actors. NGOs may include environmental and consumer groups, business associations, labor unions, human rights organizations, church and religious groups, academic institutions, think tanks, trade and industry associations, and grassroots not-for-profit organizations. NGOs have emerged as important stakeholders in discussions over the terms and conditions under which business, government, multilateral institutions and local communities manage the process of globalization, one of the most complex issues facing public policy makers, corporate executives, and broader society. These NGOs conduct business by undertaking research, organizing boycotts, and often publicizing the shortcomings of multinational corporations in terms of social, ethical, and environmental responsibility. Yet these impressions are only the most public, and often the most negative images of NGO activism. This course examines the intersections of NGOs, MNEs and respective business practices with a goal of developing informed perspectives. Prerequisites: Degree checkpoint 2 and MGMT 2100.

MGMT 3800 Business Policy and Strategy (4 Credits)
This course examines the roles and responsibilities of top managers in developing, implementing, and managing an effective organization-wide strategy. Students learn new perspectives and concepts as well as integrate learning from previous course work to solve complex and challenging business problems. Prerequisites: senior standing, MGMT 2850, and DCB checkpoint 2.

MGMT 3890 Internship in Management (1-6 Credits)
Practical experience (field study); requires written report. Prerequisite: degree checkpoint 2 and instructor's permission.

MGMT 3991 Independent Study (1-10 Credits)
Independent research/study; requires written report. Prerequisite: degree checkpoint 2 and instructor's permission.

MGMT 3992 Directed Study (1-4 Credits)

Department of Marketing

Office: Daniels College of Business, Suite 480
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-3317
Web Site: http://daniels.du.edu/faculty-research/marketing/

While advertising is part of marketing, it is not ALL of marketing. Peter Drucker, a very famous businessperson, describes the role of marketing in business this way: "Because the purpose of business is to create a customer, the business enterprise has two--and only two--basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs. Marketing is the distinguishing, unique function of the business."

In our program, we will help you learn to solve marketing problems, to innovate, to think strategically, critically and creatively about the information with which you are presented, as well as to communicate your thoughts effectively. You will work in teams, you will think globally about marketing, you will be able to recognize the ethical and legal issues with which you may be confronted. You will also consider the digital opportunities available as you practice using your marketing knowledge to create value for customers, shareholders, employees, and other stakeholders of the business.

We will expect you to take responsibility for your learning by attending every class, contributing to your teams and to your class discussions, keeping your word, and reaching your goals.

Marketing is an exciting area that addresses many of the changes taking place in business-to-consumer and business-to-business environments. Our field includes digital and other media promotions including working for either clients or ad agencies, planning social and mobile campaigns, and analyzing the results of your work. We prepare you to go into business-to-business sales or to be part of a global marketing organization, to work in supply chain management or in services marketing. Our internship program is one of the best in the college. You will have many opportunities available to secure at least one internship over the course of your studies. Students have found that the experience gained through the internship process has helped them better understand classroom discussion topics.
Along with the required major courses of consumer behavior, business-to-business marketing, marketing research, international marketing and integrated marketing strategy, you will take four electives chosen from a very broad selection of courses.

Marketing

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 36 credits; maximum of 45 credits. Requirements include:

- **MKTG 2910** Consumer Behavior 4
- **MKTG 2920** Business-to-Business Marketing 4
- **MKTG 2930** Methods of Marketing Research 4
- **MKTG 2930** International Marketing 4
- or **MKTG 2945** Global Product Innovation
- **MKTG 3950** Integrative Marketing Strategy 4

### Electives

- Select four Marketing electives (3000-level courses). 16

**Total Credits** 36

### Minor Requirements

The Marketing minor is available to all traditional DU undergraduate students.

24 credits, including:

- **MKTG 2800** Introduction to Marketing 4

### Electives

- Select five Marketing electives. 20

**Total Credits** 24

1. BSBA and BSAcc students take Introduction to Marketing (MKTG 2800) as part of the business core.

### Courses

**MKTG 2010 Survey in Marketing (4 Credits)**

Students develop the ability to make preliminary decisions regarding marketing feasibility of a new venture based on business and consumer research information. Prerequisites: Business minors only, at least sophomore standing, LGST 2000.

**MKTG 2800 Introduction to Marketing (4 Credits)**

Marketing is at its core, the interface a company has with its customers, and what could be more important in business? This introductory course is a must for any business professional, and anyone seeking to be a savvy consumer or to learn about promoting oneself. It is a challenging, hands-on course with an integrated approach to learning the basic fundamentals of the subject. It develops a student’s ability to make sound planning decisions using real information from the external environment to determine market feasibility for a real product. The course has a segmented approach, allowing students to practice application of important concepts in the classroom and engage in teamwork. The segments build upon one another to allow students to create a complete and logically reasoned marketing plan for their chosen product. In team, students prepare a written report and deliver an oral presentation about their product. Prerequisite: degree checkpoint 1.

**MKTG 2910 Consumer Behavior (4 Credits)**

What’s the real reason some consumers want a big SUV? Maybe it’s not for offroading after all! This course is a fascinating look at why consumers buy what they do, and there is often more than meets the eye. CB uses frameworks from psychology and other disciplines to describe how consumers learn and how they make decisions about their purchases. The course also delves deeper into consumer demographic and psychographic characteristics and all of these concepts are then integrated and applied to designing appropriate marketing strategies for different segments. Students have an excellent opportunity to learn more about the human mind and practical applications for marketing efforts. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

**MKTG 2920 Business-to-Business Marketing (4 Credits)**

Ever wonder how the food you eat and the clothes you wear arrive at your favorite stores? While business-to-consumer (B2C) marketing may be more familiar to many of us, nearly 75% of all marketing positions in the U.S. and around the globe are in the B2B sector. This calls for unique marketing techniques in approaching and building relationships with organizational customers, the dynamics of which are explored and discussed in this class. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.
MKTG 2930 Methods of Marketing Research (4 Credits)
The modern marketing department is held just as responsible for the dollars it spends as any other business function. To be efficient, marketing professionals must learn to gather the information they need to make evidence-based decisions, understand current and potential target markets, and even generate new ideas. This course covers methods of collecting and analyzing market-related data. In addition to learning basic research concepts, students design their own surveys, collect data, conduct data analysis in Excel, and present results. Class activities in recent quarters have included a live focus group with the clothing retailer, Sport Couture and as a guest speaker, VP of research from Media News Group. The useful aspects of handling data in this course add essential elements to a student’s toolkit for professional practice. Prerequisites: MKTG 2800, STAT 1400, INFO 1020, and degree checkpoint 2.

MKTG 2945 Global Product Innovation (4 Credits)
In this course, students learn how products are introduced and managed including developing an understanding of the product innovation process. Companies exist, thrive and prosper by delivering products and services to their customers. As customer needs and desires change and competitive offerings make product selection more difficult, companies must develop products and services that most closely match customer requirements at a maximized speed to market. This course provides students with principles, philosophies, concepts, techniques, processes and models of new product management, and also with the practical aspects of how to analyze and manage new product development issues and situations in the turbulent environments facing business organizations. Prerequisites: MKTG 2800, and degree checkpoint 2 or marketing minor.

MKTG 2992 Directed Study (1-4 Credits)

MKTG 3110 Personal Selling (4 Credits)
Do you want to have multiple job offers when you graduate? Studies suggest that students who embrace sales as a professional career are in greater demand than any other type of job. This course explores personal selling as an integral part of the promotional mix and an extension of the marketing concept. Students learn how to create value for customers by producing and presenting a consultative sales strategy. The course work includes opportunities to put theory into action through a series of team challenges that enable students to hone individual selling and presentation skills. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3360 Global Transportation Systems (4 Credits)
Managing a global supply chain involves applying increased discipline to a process with many parts. The key parts of the supply chain over which a company has the least control are the transportation carriers that connect a company with its customers and suppliers in all parts of the world. Global Transportation Systems covers the various modes of transportation including ocean vessel, barge, railroads, truck and air freight. The course touches on the operating characteristics, service, infrastructure, sustainability, ownership, finances, prices and each mode’s place in the global supply chain both across borders and domestically in several target countries including the U.S. In addition Global Transportation Systems provides students with an understanding of how public policy affects transportation infrastructure investment, security, cost and service around the world. Cross listed with MKTG 4360. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3370 Logistics Management (4 Credits)
Of the four Ps (product, price, promotion, and place), MKTG 3370 explores the “place” in a firm’s marketing efforts to gain sustainable competitive advantage. Marketing channels are the routes to market used to sell every product and service that consumers and business buyers purchase everywhere in the world. Logistics is the other half; delivering the right product at the right time to the right place in the right quantities to keep satisfied loyal customers, a crucial element in making the sale. In this course, students learn the design of marketing channels to deliver sustainable competitive advantage while building channel power and managing channel conflict. Sound strategic and tactical channel decisions are taught via an on-line computer simulation. Logistics design and execution includes best practices for demand management, order management, customer service, inventory strategy, transportation, and distribution, all of which are taught through lecture, hands-on exercises, and case studies of the world’s best supply chains. Cross listed with MKTG 4370. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3375 Strategic Sourcing (4 Credits)
Current businesses face relentless pressure to provide additional value in an ever more competitive world. Globalization of world markets has reconfigured supply networks across the globe, causing increasing complexities and challenges in sourcing. In this course, the student learns about the strategic sourcing process, from the development of a sourcing strategy to establishing, managing, and optimizing the firm’s supply base. A framework for aligning corporate, business unit and functional department objectives with a sourcing strategy for each commodity purchased by the firm will be presented, along with spend analysis, portfolio analysis, and other best practices for improving a firm’s cost and financial performance through improved supply chain performance. Cross listed with MKTG 4375. Prerequisites: MKTG 2800 and DCB checkpoint 2 completed.

MKTG 3380 Supply Chain Management (4 Credits)
Today’s economy of globally sourced manufacturing, developing markets, synchronized e-commerce, international trade lanes, and intertwined economies demand supply chains of global reach to bring goods and services from around the world to local stores or even the consumer’s front door. This course addresses the challenges and illustrates the tools required to build, maintain, and expand global supply chains. The course develops the ability to make sound strategic, tactical, and operational supply chain decisions via an on-line simulation tool, and superior supply chain design and performance is taught through in-depth case studies from the world’s top 25 supply chains. Students connect improvements in supply chain design and performance to the financial performance of a firm. Cross listed with MKTG 4380. Prerequisites: MKTG 2800, degree checkpoint 2 or marketing minor.
MKTG 3400 Introduction to Advertising (4 Credits)
Tap into your creativity and get some practical experience with this popular and omnipresent form of promotion! This exciting and dynamic course is intended to give the student a firm understanding of the principles and practice of advertising. It includes an introduction to advertising agency operations, and the many department functions. With “agency” team members, the student creates an advertising campaign, from strategy brief to execution, and present the work to an actual client. The real-life aspect of this course creates a memorable and very useful experience for undergraduate students. Recent clients for student projects have included McDonald’s and Eldora Mountain Resort. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3415 Integrated Marketing Communication (4 Credits)
Students learn how to integrate marketing messages across media by using brand management as the foundation of creating effective marketing communications. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3425 Brand Management (4 Credits)
Students learn the elements of brand management based on the consumer-based brand equity model, including a deep understanding of the “design and implementation of marketing programs and activities to build, measure, and manage brand equity.” (Keller 2008, p.xv). Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3450 Advertising Media Strategy (4 Credits)
This is not your grandparents’ media landscape, or even your parents’ for that matter! And it is no simple task to reach today’s consumer with advertising. The world of media is ever changing; with the digital revolution, media planners and buyers face more challenges than ever. In this course, students learn the process of advertising media planning and the role it plays in campaign development. The course provides students an opportunity to create a media plan and creative materials and present them to a “real world” client. Recent clients for student projects have included General Motors (Cadillac) and Altitude Sports. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3460 Advertising Creative Strategy (4 Credits)
This popular course provides an opportunity to go even further with advertising concepts and strategy. This course is designed to let the student experience the life of an ad agency team member. Students learn what it takes to collaborate with a team in creating brand-building, power ideas, and are given a campaign assignment by a “real world” client. Students work from strategy brief to execution, and present the ideas to the group, at times individually, and at times as a team. The course includes evaluation of one’s own work and that of others, application of theories about the presentation of information and images, and strengthening of presentation skills. The student’s work in developing a creative campaign should be based on past learning about advertising as well as class lectures and handouts. Creativity is emphasized in all tasks, from ad design through media selection to presentations. Recent clients for student projects include Nestle, Purina, and Leo Burnett USA. Prerequisites: MKTG 2800, MKTG 3400 and degree checkpoint 2 or marketing minor.

MKTG 3470 Public Relations (4 Credits)
Public relations require research and planning to achieve organizational communication objectives within and across target communities. Prerequisite: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3475 Mobile Marketing (4 Credits)
Smartphone adoption is forcing companies to adapt to a new customer/business paradigm. From Mobile Commerce to Location-based Services, Mobile Marketing is an essential component and focuses on how to utilize these emerging behaviors. This course has graduates and undergraduates creating mobile marketing plans/campaigns for local real-world clients. This fast-paced course is open to anyone who wants to learn more about this evolving discipline. Prerequisites: MKTG 2800 and degree checkpoint 2 or marketing minor.

MKTG 3480 Introduction to Digital Marketing (4 Credits)
Students typically see the importance of new digital technologies in their own lives, and businesses too much now connect with customers and other business through digital channels and adjust their marketing mix in order to succeed. This course provides the knowledge and skills to plan and implement a digital marketing strategy, create and manage digital marketing campaigns, and select and use the most effective tools and technologies to achieve the business’s objectives. Students learn how to successfully integrate online tools including search engine optimization, pay-per-click advertising, email marketing, blogs, viral marketing, social media, and online PR within the overall marketing mix. In addition, students study the similarities and differences covering the mix of elements in traditional and digital marketing, along with other topics such as customer relationship marketing, permission and consumer concerns around privacy, trust, and security. Marketers with expertise in digital marketing are an invaluable asset to any organization as emerging technology continues to force organizations to adapt in order to excel in the digital age. Guest speakers have included best in class online retailers like Sierra Trading Post and Gaiam. Prerequisites: MKTG 2800 and DCB checkpoint two or marketing minor.

MKTG 3485 Search Engine Marketing: Google Analytics & AdWords (4 Credits)
The digital marketing ecosystem has hundreds of tools that marketers can utilize to increase revenue, reduce operational costs and develop brands with depth. This course teaches you how to use the most essential of those tools; Google Analytics and Google AdWords. Our goal is to enable students to earn the individual certification for Google Analytics and Google AdWords. By partnering with businesses, students gain access to real world data. This course is fast-paced and helps connect the dots between marketing endeavors and their impact on business. Prerequisites: DCB checkpoint 2 or marketing minor.
MKTG 3490 Social Media Marketing (4 Credits)
Social media marketing is an evolving field with consumers driving the changes marketers are seeing. Based on your business model, social media may be more than just distribution and prosumers may be a part of your long-term business strategy. This class illuminates the increasing importance of social media as it relates to consumer behavior and the purchase cycle. This course also develops a strategic model for a diverse range of businesses (B2B, B2C, Product, Service, Online, Online with Brick and Mortar) that empowers students as a marketer to determine their best strategy. Cross listed with MKTG 4815. Prerequisites: MKTG 2800.

MKTG 3495 Tech in Marketing: Design Tools and Digital Foundations (4 Credits)
We will be learning how to use HTML, CSS, Adobe Photoshop, and Adobe Illustrator.

MKTG 3630 International Marketing (4 Credits)
The shrinking planet and constant pressure to maintain a firm’s growth mean that global marketing continues to grow in importance. This course introduces the various economic, social, cultural, political, and legal dimensions of international marketing from conceptual, methodological and application perspectives, and emphasizes how these international environmental factors should affect, and can be integrated into, marketing programs and strategies. This course provides students with methods for analyzing world markets and their respective consumers and environments, and to equip students with the skills in developing and implementing marketing strategies and decision making in international context. It is designed based on a combination of lectures and discussions of relevant concepts, case analyses of real global marketing issues, videos and readings from the business press, country snapshots, and a group research project in which student teams launch a discrete product in a foreign country of their choice. Prerequisites: MKTG 2800 and Daniels UG Checkpoint 2 1 or Marketing Minor Non-Business 2 1.

MKTG 3640 Services Marketing (4 Credits)
The unique challenges of selling the “invisible” characteristics inherent to services marketing are identified and addressed in this course. Students investigate customer requirements, alignment of service design and standards, service failure and recovery strategies, and the complexity of long-term customer relationships relevant to profit and non-profit service organizations. Because of the difficulty in describing and depicting service development, students design a service blueprint that serves as an innovative tool in the strategic process. Recent guest speakers have included Brian Jensen, Senior Vice President of FirstBank Data Corporation and Eric McGough, Managing Director of Northwestern Mutual Financial Network. Prerequisites: MKTG 2800 and Daniels UG Checkpoint 2 1 or Marketing Minor Non-Business 2 1.

MKTG 3650 Innovation Strategies (4 Credits)
This course is a fresh and dynamic course, which both challenges and leverages traditional marketing thinking in new and creative ways. Students read a variety of pieces from contemporary thought-leaders in the world of business, marketing, philosophy, and education to give context and perspective to innovative thinking and ideation techniques which are relevant and necessary for today’s marketing leaders. Hands-on activities, reality-based projects, and interactive debates are the hallmarks of this course. Recent guest speakers have included William Espey (CMO, Chipotle), Justin Breseler (VP Marketing, Visit Denver) and recent alumni. One past Innovation Strategies student recently said, “After going through this intellectually stimulating class marketing no longer feels like consumer manipulation but rather it feels like strategy, design, and solutions that can come together and make culture and business better – it is really important.”Prerequisites: MKTG 2800 and Daniels UG Checkpoint 2 1 or Marketing Minor Non-Business 2 1.

MKTG 3660 Sports & Entertainment Marketing (4 Credits)
There are few products about which consumers are more passionate than their sports and entertainment expenditures, so this topic is always an exciting one in marketing. This course provides an in-depth look at the processes and practices of marketing sports, concerts, film and other entertainment. The course emphasizes the practical use of advertising, promotion and public relations in creating athlete or entertainer images, providing a quality fan experience, promoting sponsorships or driving event ticket sales. Cross listed with MKTG 4660. Prerequisite: MKTG 2800 and Daniels UG Checkpoint 2 1 or Marketing Minor Non-Business 2 1.

MKTG 3705 Topics in Marketing (1-4 Credits)
Prerequisites: MKTG 2800 and Daniels UG Checkpoint 2 1 or Marketing Minor Non-Business 2 1.

MKTG 3950 Integrative Marketing Strategy (4 Credits)
You may have heard the saying that “The journey is as important as the destination.” In organizations the corollary is the strategic planning is as important as the plan. As a result, the planning process has become increasingly important for all business functions (e.g., production, accounting, R & D, marketing). The objective of this course is to enable students to utilize a rigorous planning process to develop marketing programs. This activity involves integrated problem solving using concepts, theories and primary and secondary information, and is characterized by logical use of facts leading to alternatives, which in turn lead to solutions. By the end of the course students should be able to develop effective marketing programs, and to understand the applications and limitations of the principal planning tools a marketing manager has at his/her disposal. This course needs to be taken within 2 quarters of graduation. Prerequisites: MKTG 2910, MKTG 2920, MKTG 2930, and Daniels UG Checkpoint 2 1.

MKTG 3980 Marketing Internship (1-8 Credits)
We learn by doing. That’s what a marketing internship at Daniels is all about. Recent studies show that one to three internships on a resume go a long way towards landing that first job in marketing. At Daniels, we network with some of the top marketers in Denver and across the U.S. Our marketing students have worked at National CineMedia, Integer Advertising, Bank of America, Enterprise, Northwestern Mutual Insurance, eBags, Crispin-Porter + Bogusky, Einstein’s, Johns Manville, Ski Magazine, the Pepsi Center, 15 Million Elephants, Flextronics, Merrill Lynch, Dish Network, AEG Live, Altitude Sports & Entertainment, and the list goes on. Not only will students earn school credit, but also they may very well land a paid internship and eventually a full-time job. Course requirements include an internship report that covers the students’ experience on the job, a study of the industry, and what they learned from their company. It’s a win-win course where students put into practice the marketing concepts they have learned at DU, and discover new marketing tactics from their company co-workers. “Thanks to the University of Denver for fostering this partnership and providing such great students” (NCM Media Networks). Prerequisites: marketing major and instructor’s permission.
MKTG 3991 Independent Study (1-10 Credits)
Independent research/study; requires written report. Restricted to marketing majors. Prerequisites: degree checkpoint 2, marketing major and instructor’s permission.

MKTG 3992 Directed Study (1-4 Credits)

MKTG 4845 Tech in Marketing: Design Tools and Digital Foundations (4 Credits)
We will be learning how to use HTML, CSS, Adobe Photoshop and Adobe Illustrator.

Department of Mathematics

Office: Aspen Hall, Suite 717
Mailing Address: 2280 S. Vine St. Denver, CO 80208
Phone: 303-871-2911
Fax: 303-871-3173
Email: math-info@math.du.edu
Web Site: http://www.math.du.edu

The Department of Mathematics offers a bachelor of arts in mathematics, bachelor of arts in mathematics with concentration in finance and bachelor of science in mathematics. These programs provide a strong foundation in theoretical and applied mathematics with particular emphasis on the development of logical and analytical problem-solving skills. This major is often combined with a major or minor in natural sciences, computer science, business and related fields. It is an excellent preparation for graduate school in quantitative subjects. Math majors find jobs in academia, high-tech industry, financial industry and government agencies, with positions including research mathematician, applied mathematician, engineer, computer programmer, financial analyst, economist, actuary and teacher.

Mathematics

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

This degree requires completion of 48 credits of MATH courses numbered 1951 or higher, including at least 20 credits at the 3000-level or higher. The following courses are required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2060</td>
<td>Elements of Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2200</td>
<td>Mathematical Reasoning &amp; Proof</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3161</td>
<td>Introduction to Real Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3170</td>
<td>Introduction to Abstract Algebra</td>
<td>4</td>
</tr>
<tr>
<td>Additional Courses</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

Note

• In addition, students must complete the ETS Major Field Test in Mathematics as instructed by the department, and satisfy all requirements for the Bachelor of Arts degree as outlined in the University of Denver Undergraduate Bulletin.
• It is recommended that students take MATH 3151 Advanced Linear Algebra after MATH 2200 Mathematical Reasoning & Proof but before MATH 3161 Introduction to Real Analysis and MATH 3170 Introduction to Abstract Algebra.

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

This degree requires completion of 52 credits of MATH courses numbered 1951 or higher, including at least 24 credits at the 3000-level or higher. The following courses are required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

...
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2060</td>
<td>Elements of Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2200</td>
<td>Mathematical Reasoning &amp; Proof</td>
<td></td>
</tr>
<tr>
<td>MATH 3161</td>
<td>Introduction to Real Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3170</td>
<td>Introduction to Abstract Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

A MATH course at the 3000-level or higher that (a) is different from MATH 3161 and MATH 3170 and (b) has either MATH 2200 or another 3000-level MATH course as a prerequisite.

Additional courses 12

Total Credits 52

Notes

- In addition, students must complete the ETS Major Field Test in Mathematics as instructed by the department, and satisfy all requirements for the Bachelor of Science degree as outlined in the University of Denver Undergraduate Bulletin.
- It is recommended that students take MATH 3151 Advanced Linear Algebra after MATH 2200 Mathematical Reasoning & Proof but before MATH 3161 Introduction to Real Analysis and MATH 3170 Introduction to Abstract Algebra.
- Students are encouraged to complete the analysis sequence MATH 3161 Introduction to Real Analysis, MATH 3162 Introduction to Real Analysis II, MATH 3110 Topology, or the algebra sequence MATH 3170 Introduction to Abstract Algebra, MATH 3166 Group Theory, MATH 3176 Rings and Fields.

Bachelor of Arts Major Requirements with Concentration in Finance

(183 credits required for the degree) (p. 36)

This degree requires completion of 48 credits of MATH courses numbered 1951 or higher and an additional 20 credits of ACTG and FIN courses. The following courses are required:

Mathematics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2060</td>
<td>Elements of Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3080</td>
<td>Introduction to Probability</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3161</td>
<td>Introduction to Real Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3170</td>
<td>Introduction to Abstract Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3151</td>
<td>Advanced Linear Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Math Electives 12

Business

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 2200</td>
<td>Introduction to Financial Reporting</td>
<td>4</td>
</tr>
<tr>
<td>FIN 2800</td>
<td>Financial Decision Making</td>
<td>4</td>
</tr>
</tbody>
</table>

Select at least 12 credits of FIN courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3110</td>
<td>Financial Institutions</td>
<td></td>
</tr>
<tr>
<td>FIN 3200</td>
<td>Corporate Financial Problems</td>
<td></td>
</tr>
<tr>
<td>FIN 3210</td>
<td>Corporate Financial Theory</td>
<td></td>
</tr>
<tr>
<td>FIN 3300</td>
<td>Investments</td>
<td></td>
</tr>
<tr>
<td>FIN 3310</td>
<td>Analysis of Securities</td>
<td></td>
</tr>
</tbody>
</table>
Notes

• In addition, students must complete the ETS Major Field Test in Mathematics as instructed by the department, and satisfy all requirements for the Bachelor of Arts degree with concentration in Finance as outlined in the University of Denver Undergraduate Bulletin.
• Students may enroll in ACTG 2200 Introduction to Financial Reporting only if they are formally enrolled in this degree, have completed MATH 3080 Introduction to Probability and have Microsoft Excel certification.
• Students in this degree are not eligible for a business foundations minor or a finance minor. Good choices for complementary minors include economics, statistics, or computer science.

Minor Requirements

This minor requires completion of at least 20 credits in MATH courses numbered 1951 or higher. COMP 2300 Discrete Structures in Computer Science may be counted toward the math minor. Courses not covered by these requirements must be approved in writing by a mathematics faculty advisor.

Courses

MATH 1010 Elements of College Algebra (2,4 Credits)
This course is designed to review the required algebra skills to be successful in Business Calculus. The following topics are covered: review of basic algebra, solving equations and inequalities, rectangular coordinate systems and graphing, polynomial and rational functions, exponential and logarithmic functions, and solving exponential and logarithmic equations. Students who completed a MATH course numbered 1200 or higher may not take this course.

MATH 1070 College Algebra and Trigonometry (4 Credits)
Selected topics in algebra and analytic trigonometry intended to prepare students for the calculus sequence. Cannot be used to satisfy the Analytical Inquiry: The Natural and Physical World requirement. Students who completed a MATH course numbered 1951 or higher may not take this course.

MATH 1150 Foundations Seminar (4 Credits)
The seminars offer challenging and interesting mathematical topics that require only high school mathematics. Examples of seminars are Introduction to Cryptography, Patterns and Symmetry, Mathematical Art and Patterns of Voting. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement.

MATH 1200 Calculus for Business and Social Sciences (4 Credits)
This is a one-quarter course for students in business, social sciences, and liberal arts. It covers elementary differential calculus with emphasis on applications to business and the social sciences. Topics include functions, graphs, limits, continuity, differentiation, and mathematical models. Students are required to attend weekly labs. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement.

MATH 1951 Calculus I (4 Credits)
Limits, continuity, differentiation of functions of one variable, applications of the derivative. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Prerequisite: MATH 1070 or equivalent.

MATH 1952 Calculus II (4 Credits)
Differentiation and integration of functions of one variable especially focusing on the theory, techniques and applications of integration. Prerequisite: MATH 1951.

MATH 1953 Calculus III (4 Credits)
Integration of functions of one variable, infinite sequences and series, polar coordinates, parametric equations. Prerequisite: MATH 1952 OR math 1962.

MATH 1962 Honors Calculus II (4 Credits)
Same topics as MATH 1952 treated rigorously and conceptually. Topics include differentiation and integration of functions of one variable especially focusing on the theory, techniques and applications of integration. Prerequisites: MATH 1951 and permission of instructor.

MATH 1963 Honors Calculus III (4 Credits)
Same topics as MATH 1953 treated rigorously and conceptually. Topics include integration of functions of one variable, infinite sequences and series, polar coordinates, parametric equations. Prerequisites: MATH 1952 or MATH 1962 and permission of instructor.

MATH 1992 Directed Study (1-10 Credits)

MATH 2050 Symbolic Logic (4 Credits)
Modern propositional logic; symbolization and calculus of predicates, especially predicates of relation. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Cross listed with PHIL 2160.

MATH 2060 Elements of Linear Algebra (4 Credits)
Matrices, systems of linear equations, vectors, eigenvalues and eigenvectors; idea of a vector space; applications in the physical, social, engineering and life sciences. Prerequisite: MATH 1700 or equivalent.
MATH 2070 Introduction to Differential Equations (4 Credits)
Solution of linear differential equations; special techniques for nonlinear problems; mathematical modeling of problems from physical and biological sciences. Prerequisite: MATH 1953 or MATH 1963.

MATH 2080 Calculus of Several Variables (4 Credits)
Multivariable processes encountered in all sciences; multiple integration, partial differentiation and applications; algebra of vectors in Euclidean three-space; differentiation of scalar and vector functions. Prerequisite: MATH 1953 or MATH 1963.

MATH 2200 Mathematical Reasoning & Proof (4 Credits)
Introduction to theory of sets; relations and functions; logic, truth tables and propositional calculus; proof techniques; introduction to combinatorial techniques.

MATH 2992 Directed Study (1-10 Credits)

MATH 3000 The Real World Seminar (1 Credit)
Lectures by alumni and others on surviving culture shock when leaving the University and entering the job world. Open to all students regardless of major. Cross listed with COMP 3000.

MATH 3010 History of Mathematics (4 Credits)
This course surveys major mathematical developments beginning with ancient Egyptians and Greeks and tracing the development through Hindu-Indian mathematics, Arabic mathematics, and European mathematics up to the 18th century. Prerequisite: MATH 1953 or MATH 1963.

MATH 3040 Lattices and Order (4 Credits)
Ordered sets, lattices as relational and as algebraic structures, ideals and filters, complete lattices, distributive and modular lattices, Boolean algebras, duality for finite distributive lattices. Prerequisite: MATH 2200.

MATH 3050 Set Theory (4 Credits)
Zermelo-Fraenkel axioms, axiom of choice, Zorn's Lemma, ordinals, cardinals, cardinal arithmetic. Prerequisite: MATH 2200.

MATH 3060 Mathematical Logic (4 Credits)
Classical propositional calculus (deductive systems and truth-table semantics), first-order logic (axiomatization and completeness), elements of recursion theory, introduction to nonclassical logics. Prerequisite: MATH 2200.

MATH 3080 Introduction to Probability (4 Credits)
Basic probability models, combinatorial methods, random variables, independence, conditional probability, probability laws, applications to classical problems. Prerequisite: MATH 1953 or MATH 1963.

MATH 3090 Mathematical Probability (4 Credits)
Limit theorems for independent random variables, multivariate distributions, generating functions. Prerequisites: MATH 2080 and MATH 3080.

MATH 3110 Topology (4 Credits)
Point set topology including topological spaces, connectedness, compactness and separate axioms; preparation for advanced courses in analysis. Cross listed with MATH 4110.

MATH 3151 Advanced Linear Algebra (4 Credits)
Vector spaces, linear mappings, matrices, inner product spaces, eigenvalues and eigenvectors. Prerequisite: MATH 2060 and MATH 2200.

MATH 3161 Introduction to Real Analysis (4 Credits)
A theoretical introduction to the structure of real numbers, to convergence of sequences and series, and to the topology of the real line, including limits and continuity. Prerequisites: MATH 2080 and MATH 2200.

MATH 3162 Introduction to Real Analysis II (4 Credits)
A rigorous introduction to the analysis of functions of a real variable, including differentiation, Riemann integration, and the notions of pointwise and uniform convergence for sequences of functions. Prerequisite: MATH 3161.

MATH 3166 Group Theory (4 Credits)
Groups and homomorphisms, isomorphism theorems, symmetric groups and G-sets, the Sylow theorems, normal series, fundamental theorem of finitely generated abelian groups. Cross listed with MATH 4166. Prerequisite: MATH 3170.

MATH 3170 Introduction to Abstract Algebra (4 Credits)
Examples of groups, permutations, subgroups, cosets, Lagrange theorem, normal subgroups, factor groups, homomorphisms, isomorphisms, rings, integral domains, quaternions, rings of polynomials, Euclid algorithm, ideals, factor rings, maximal ideals, principal ideals, fields, construction of finite fields. Prerequisite: MATH 2060 and MATH 2200.

MATH 3176 Rings and Fields (4 Credits)
Rings, domains, fields; ideals, quotient rings, polynomials; PIDs, UFDs, Euclidean domains; maximal and prime ideals, chain conditions; extensions of fields, splitting fields, algebraic and transcendental extensions; brief introduction to Galois theory. Cross listed with MATH 4176. Prerequisite: MATH 3170 or equivalent.

MATH 3260 Metric Spaces (4 Credits)
Metric spaces and continuous functions; completeness and compactness; examples including norm spaces; pointwise and uniform convergence; Baire Category Theorem. Cross listed with MATH 4260. Prerequisite: MATH 3161 or equivalent.
MATH 3311 Linear Programming (4 Credits)
Linear optimization models, simplex algorithm, sensitivity analysis and duality, network models, dynamic programming, applications to physical, social and management sciences. Prerequisite: MATH 2060.

MATH 3312 Markov Chains (4 Credits)
Discrete-time and continuous Markov Chains, ergodic theorems, random processes, elementary queueing theory, applications. Prerequisite: MATH 2060 and MATH 3080.

MATH 3400 Introduction to Geometry (4 Credits)
Specific geometrical systems including finite, Euclidean, non-Euclidean and projective geometries. Prerequisite: MATH 2200.

MATH 3451 Chaos, Dynamics & Fractals (4 Credits)
Introduction to one-dimensional dynamical systems, fractals; fixed and periodic points; sources and sinks; period doubling and tangent node bifurcations; chaotic dynamical systems; Sarkovskii's Theorem. Prerequisite: MATH 3161.

MATH 3550 Introduction to Theory of Numbers (4 Credits)
Concepts of nonanalytic number theory and its history; prime numbers, divisibility, continued fractions, modular arithmetic, Diophantine equations and unsolved conjectures. Prerequisites: MATH 2200.

MATH 3651 Ordinary Differential Equations (4 Credits)
Modeling of phenomena by ordinary differential equations; techniques of analysis and solution of such equations; oscillation theory and boundary value problems, power series methods, special functions, Laplace transforms and difference equations. Prerequisites: MATH 2060 and MATH 2070.

MATH 3661 Partial Differential Equations (4 Credits)
First and second order linear equations, Fourier series, the wave equation, the Cauchy problem, the heat equation, maximum principles, Laplace's equation, Green's functions. Prerequisites: MATH 2070 and MATH 2080.

MATH 3701 Combinatorics (4 Credits)
The principle of inclusion and exclusion, elementary counting techniques, systems of distinct representatives, partitions, recursion and generating functions, Latin squares, designs and projective planes. Prerequisite: MATH 2200.

MATH 3705 Topics in Mathematics (4 Credits)
Varying selected advanced topics in mathematics, depending on student demand and instructor interest.

MATH 3710 Graph Theory (4 Credits)
Paths, cycles, trees, Euler tours and Hamilton cycles, bipartite graphs, matchings, basic connectivity theorems, planar graphs, Kuratowski's theorem, chromatic number, n-color theorems, introduction to Ramsey theory. Prerequisite: MATH 2200.

MATH 3720 Coding Theory (4 Credits)
Goals of coding theory and information theory, instantaneous and Huffman codes, Shannon theorems, block and linear codes, generating and parity-check matrices, Hamming codes, perfect codes, binary Golay code, Reed-Muller codes, cyclic codes, BCH codes, Reed-Solomon codes, ideas of convolutional and turbo codes. Prerequisite: MATH 3170.

MATH 3851 Functions Complex Variable (4 Credits)
Complex numbers, analytic functions, complex integration, series expansions, residue theory, conformal maps, advanced topics and applications. Prerequisites: MATH 2060 and MATH 2080.

MATH 3991 Independent Study (1-10 Credits)
Cannot be arranged for any course that appears in regular course schedule for that particular year.

MATH 3992 Directed Study (1-10 Credits)
MATH 3995 Independent Research (1-10 Credits)

Department of Media, Film and Journalism Studies

Office: Mass Communications Building, Room 127
Mail Code: 2490 S. Gaylord St. Denver, CO 80208
Phone: 303-871-2166
Email: mfjs@du.edu
Web Site: http://www.du.edu/ahss/mfjs

The Department of Media, Film and Journalism Studies is devoted to exploring the ways in which television, film, radio, print, Web and social media connect individuals with the world and how these mediated relationships help shape the societies in which people live. The department has an innovative and creative faculty with many areas of specialization. Faculty expertise is centered in these areas of study:

• Digital media studies: Web and multimedia design, programming, digital video/audio, influence of digital media on individuals, culture and society
• Film studies and production: film and digital video production; narrative, documentary and experimental styles; script/screenwriting; film, broadcasting and cable-casting history and criticism
• Journalism: newswriting, feature writing, design and layout, online journalism, activist media, media law, policy and ethics
• Media studies: contemporary communications media; mass media; interactive and digital media; media influence on individuals, culture and society; globalization and media; history and future of the media industry; social, political, economic and cultural implications of media process and content; reading and analysis of media texts
• Strategic communication: public relations, communication campaigns, health communication, global and multicultural communication, media law, policy and ethics, advertising and audience research

The four majors all provide the theoretical grounding and leading-edge experience necessary to address the complex challenges of communication now emerging.

The department also offers internship experiences in local, regional, national and international placements. Career opportunities for graduates in communications, film and television, journalism and digital media studies include a wide range of positions in business, nonprofit organizations, media, government and education.

Film Studies and Production

The film studies and production major facilitates a solid grounding in the history, theory, production and criticism of motion picture arts. Students acquire critical skills in the reading and analysis of media texts together with those involved in various modes of motion-picture production. Students are encouraged to consider the consequences and ethical implications of the approaches to style and content they choose, and are encouraged to situate their work within the many historical contexts presented in the various production, history and criticism classes. The major teaches narrative, documentary and experimental modes of script/screenwriting and filmmaking; establishes a technical proficiency in camera use, lighting, digital editing software and sound design; and develops the ability to write script treatments and project proposals, as well as critical arguments about media representations and constructions.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

*All students are required to complete an assessment essay for no credit before they graduate (preferably during their senior year).

40 credits, including the following:

Gateway Course
MFJS 2000  Introduction to Film Criticism  4

Applied Courses
MFJS 3215 & MFJS 2150  Introduction to Field Production & Editing and Scriptwriting  8

History Course
Select one of the following:  4

MFJS 2290  Innovations in Media and Communications
MFJS 3203  Women and Film
MFJS 3206  Film History I: Silent Cinema
MFJS 3212  Film History II: Sound Cinema
MFJS 3216  Film History III: Contemporary Cinema
MFJS 3240  Film and Television Genres
MFJS 3260  History of Photography: American Cultural Perspectives
MFJS 3261  Green Screen: Cases and Concepts in Environmental Filmmaking
MFJS 3900  Topics in Mass Communications (approved by the student's advisor)

Depth Courses
MFJS 3222 & MFJS 3224  Experimental Film/Video Theory & Production and Introduction to 16mm Film and HD Digital Cinematography  8

Electives
Select two of the following:  8

MFJS 2300  Media, Environment and Culture (Media, Environment and Culture)
MFJS 3204  Film & Broadcast Documentary
MFJS 3223  Advanced Editing
MFJS 3330  Broadcast & Video Journalism
MFJS 3900  Topics in Mass Communications (Directing and Acting for the Screen)
MFJS 3900  Topics in Mass Communications
Capstone Experience
Select one of the following: 8

**Narrative Film Sequence**
- MFJS 3218 Narrative Film/Video Production I
- MFJS 3220 and Narrative Film/Video Production II

**Documentary Film Sequence**
- MFJS 3219 Documentary Film/Video Production I
- MFJS 3221 and Documentary Film/Video Production II

Total Credits 40

Only four credits of internship may be applied toward the first 40 credits required for the major. An additional four credits of internship may be applied beyond the 40-credit minimum.

Minor Requirements

*All students are required to complete an assessment essay for no credit before they graduate (preferably during their senior year).

20 credits, including:

**Required Coursework**
- MFJS 2000 Introduction to Film Criticism 4
- MFJS 3215 Introduction to Field Production & Editing 4

**Electives**
Select three of the following: 12
- MFJS 2150 Scriptwriting
- MFJS 2300 Media, Environment and Culture (Media, Environment and Culture)
- MFJS 3203 Women and Film
- MFJS 3204 Film & Broadcast Documentary
- MFJS 3206 Film History I: Silent Cinema
- MFJS 3212 Film History II: Sound Cinema
- MFJS 3216 Film History III: Contemporary Cinema
- MFJS 3218 Narrative Film/Video Production I
- MFJS 3219 Documentary Film/Video Production I
- MFJS 3220 Narrative Film/Video Production II
- MFJS 3221 Documentary Film/Video Production II
- MFJS 3222 Experimental Film/Video Theory & Production
- MFJS 3223 Advanced Editing
- MFJS 3224 Introduction to 16mm Film and HD Digital Cinematography
- MFJS 3240 Film and Television Genres
- MFJS 3260 History of Photography: American Cultural Perspectives
- MFJS 3261 Green Screen: Cases and Concepts in Environmental Filmmaking

Total Credits 20

Journalism Studies

Students are encouraged to develop understandings of the media through coursework that aims to challenge them and prepare them for the changing journalism environment by developing their basic understandings in law, ethics, theory and history of the media.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

*All students are required to complete an assessment essay for no credit before they graduate (preferably during their senior year).

40 credits, including the following:

**Foundational Course**
Select two of the following: 8
### Culture, History and Politics
Select one of the following (can also select from the foundational courses list):  
- MFJS 2000: Introduction to Film Criticism  
- MFJS 3020: Mass Communication Effects  
- MFJS 3150: Activist Media: A Historical Overview 1960-Present  
- MFJS 3205: International & Development Communication  
- MFJS 3700: New Media Law & Regulation  
- MFJS 3900: Topics in Mass Communications

### Core Journalism Courses
- MFJS 2140 & MFJS 2240: Newswriting & Reporting and Online & Visual Journalism

### Law and Ethics
- MFJS 3040 & MFJS 3120: Media Law and Media Ethics

### Writing and Editing
Select one of the following:  
- MFJS 3208: Narrative and Longform Journalism  
- MFJS 3310: Advanced Newswriting & Reporting  
- MFJS 3900: Topics in Mass Communications (journalism studies)

### Visual or Digital Journalism
Select one of the following:  
- MFJS 3201: Digital Graphic Design  
- MFJS 3215: Introduction to Field Production & Editing  
- MFJS 3330: Broadcast & Video Journalism  
- MFJS 3501: Web Design & Content Development  
- MFJS 3504: Advanced Multimedia Storytelling and Publishing  
- MFJS 3852: Advanced Design, Layout, and Editing

### Internship
- MFJS 3980: Internship in Mass Communication

### Total Credits
40

1. Approved by the student's advisor.
2. Only four credits of internship may be applied toward the first 40 credits required for the major. An additional four credits of internship may be applied beyond the 40-credit minimum.

---

**Media Studies**

This major is designed for students who want to gain a broad knowledge of media industries and of media studies grounded in history, foundations, globalization and media theory. It is also intended to take advantage of the particular skills and resources of the faculty in the Department of Media, Film and Journalism Studies. Contemporary communications media—including traditional mass media as well as interactive and digital media—are integral to political, economic and cultural life today. The major emphasizes course work that examines the role and influence of media in society from various perspectives.

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

*All students are required to complete an assessment essay for no credit before they graduate (preferably during their senior year).

40 credits, including the following:
Foundations Course
Select two of the following: 8
- MFJS 2000 Introduction to Film Criticism
- MFJS 2200 Emergent Digital Practices and Cultures
- MFJS 2210 Introduction to Media and Culture
- MFJS 2280 Politics and Media
- MFJS 2300 Media, Environment and Culture (Media, Environment and Culture)

History Course
Select one of the following: 4
- MFJS 2290 Innovations in Media and Communications
- MFJS 3150 Activist Media: A Historical Overview 1960-Present
- MFJS 3160 Networked Journalism
- MFJS 3204 Film & Broadcast Documentary
- MFJS 3206 Film History I: Silent Cinema
- MFJS 3212 Film History II: Sound Cinema
- MFJS 3216 Film History III: Contemporary Cinema
- MFJS 3240 Film and Television Genres
- MFJS 3260 History of Photography: American Cultural Perspectives
- MFJS 3261 Green Screen: Cases and Concepts in Environmental Filmmaking
- MFJS 3900 Topics in Mass Communications

Advanced Conceptual Course
Select one of the following: 4
- MFJS 3020 Mass Communication Effects
- MFJS 3110 Audience Research
- MFJS 3120 Media Ethics
- MFJS 3040 Media Law

International/Intercultural Communication Course
Select one of the following: 4
- MFJS 3205 International & Development Communication
- MFJS 3652 Culture, Gender, and Global Communication
- MFJS 3440 Global & Multicultural Campaigns

Electives
Select five courses from the following (or from the courses listed above): 20
- Digital Media Studies: MFJS 3211, MFJS 3501, MFJS 3700
- Film and Video Production: MFJS 3215, MFJS 2150, MFJS 3203, MFJS 3900, MFJS 3260
- Journalism: MFJS 2140, MFJS 2240, MFJS 3201
- Media and Culture: ASEM 2529, ASEM 2540, ASEM 2560
- Strategic Communication: MFJS 2400, MFJS 3410, MFJS 3440
- General: MFJS 3980, MFJS 3991

Total Credits 40

Only four credits of internship may be applied toward the first 40 credits required for the major. An additional four credits of internship may be applied beyond the 40-credit minimum.

Strategic Communication
The strategic communication major emphasizes communication theory and practice, grounded in history and strategic planning. This major introduces students to the concepts, skills and issues associated with different types of public information campaigns and other forms of strategic messaging. Students benefit from the varied expertise of our faculty in nonprofit, international, intercultural, health, corporate, crisis and political messaging as they learn what it means to be a strategic, ethical and culturally sensitive communicator in the fields of public relations, advertising and health.

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)
*All students are required to complete an assessment essay for no credit before they graduate (preferably during their senior year).

40 credits, including the following:

**Gateway Course**
- MFJS 2400 Strategic Communication Planning

**Foundational Courses**
- MFJS 3410 Strategic Messaging
- MFJS 3040 Media Law
- MFJS 3120 Media Ethics

**Global and Multicultural Courses**
Select one of the following:
- MFJS 3205 International & Development Communication
- MFJS 3440 Global & Multicultural Campaigns
- MFJS 3652 Culture, Gender, and Global Communication

**Theory or Methods Courses**
Select one of the following:
- MFJS 2210 Introduction to Media and Culture
- MFJS 3020 Mass Communication Effects
- MFJS 2280 Politics and Media
- MFJS 3150 Activist Media: A Historical Overview 1960-Present
- MFJS 3160 Networked Journalism
- MFJS 3700 New Media Law & Regulation
- MFJS 3110 Audience Research

**Writing, Design, or Production**
Select two of the following:
- MFJS 2140 Newswriting & Reporting
- MFJS 2240 Online & Visual Journalism
- MFJS 3208 Narrative and Longform Journalism
- MFJS 3201 Digital Graphic Design
- MFJS 3310 Advanced Newswriting & Reporting
- MFJS 3501 Web Design & Content Development
- MFJS 2000 Introduction to Film Criticism
- MFJS 3215 Introduction to Field Production & Editing
- MFJS 3504 Advanced Multimedia Storytelling and Publishing
- MFJS 3900 Topics in Mass Communications

**Capstone Experience**
- MFJS 3420 Strategic Communication Seminar
- MFJS 3980 Internship in Mass Communication

**Total Credits**
- 40

Only four credits of internship may be applied toward the first 40 credits required for the major. An additional four credits of internship may be applied beyond the 40-credit minimum.

**Courses**

**MFJS 2000 Introduction to Film Criticism (4 Credits)**
Theories and methods of social, cultural and aesthetic criticism of film; emphasis on critical writing. Laboratory fee required. This course counts toward the Analytical Inquiry: Society and Culture requirement.

**MFJS 2100 Culture, Media and Power (4 Credits)**
Theories of culture and the relationships among media, culture and society, focusing on ways in which contemporary popular cultures are produced and articulated, and to social politics of representation. Crosslisted with DMST 2100, MCOM 2100.

**MFJS 2110 Technical Foundations of Digital Media (4 Credits)**
The course provides the fundamental concepts of digital systems. Study of the number systems and components of computers (hardware and firmware) and how they function to solve problems.
MFJS 2130 Literary Journalism (4 Credits)
Fundamentals of writing for film and television. Cross listed with MFJS 4450. Prerequisite: MFJS 2000 or permission of instructor.

MFJS 2140 Newswriting & Reporting (4 Credits)
Fundamentals of newswriting and reporting for print and broadcast journalism. Laboratory fee required.

MFJS 2150 Scriptwriting (4 Credits)
Behavioral science theory as applied to mass communications systems and audiences.

MFJS 2200 Emergent Digital Practices and Cultures (4 Credits)
This course introduces students to the historical, economic, legal and social contexts of emergent digital practices and explores the various ways technology shapes and is shaped by culture. The rapid growth of participatory culture online through, for example, social networking sites, interactive news sites, gaming, mobile apps, and blogging has significant social implications and brings up issues of privacy, intellectual property, and the nature of community and public engagement. This class will explore these issues through various theoretical lens and concrete cases including politics, youth culture, activism, news and art. Particular emphasis will be placed on the question of how new media differs from mass media across various fields of cultural production (music, news, advertising, for example) and on what influence new digital products and practices might have on these industries and on cultures and societies more generally. This course counts towards the Analytical Inquiry: Society and Culture requirement. Cross-listed with EDPX 2200.

MFJS 2210 Introduction to Media and Culture (4 Credits)
Course introduces students to the organization of the U.S. media industries and their historical and contemporary role in U.S. culture. This course counts toward the Scientific Inquiry: Society and Culture requirement.

MFJS 2240 Online & Visual Journalism (4 Credits)
An introduction to web-based, print, video, and audio news in a rolling deadline format. It also includes a project-based cross-cultural component to highlight internationalization of the news industries and to build upon the internationalization focus of the University. Prerequisite: MFJS 2140.

MFJS 2280 Politics and Media (4 Credits)
We examine the nature of the media and how media institutions shape the way citizens understand politics. We discuss global media institutions and the role media play in various societies. We explore the role of media in providing information for citizens in a democracy, examine how the media influence the political process, and investigate how the goals of and changes within the media industry influence the effect media coverage has on the political process. Through our study, we explore how the media either enhance or limit the potential for citizens to contribute to democracy. This course counts toward the Scientific Inquiry: Society and Culture requirement.

MFJS 2290 Innovations in Media and Communications (4 Credits)
Today, it is difficult to imagine a life free of the media. There are more than 4 billion mobile phones in the world, and a billion people are now able to access the Internet. Television is available to close to 100% of people living in the media-saturated societies of North America, western and Eastern Europe, and East Asia, with radio widely available almost everywhere else. Moreover, with YouTube, blogs, online gaming, citizen journalism, experimental film, and peer-to-peer file sharing, people are actively creating and sharing their own news and entertainment experiences like never before. Communication technologies are changing the way money circulates, how and where business is conducted, the ways in which labor is deployed, and how people communicate between home and work, national and diasporic contexts. The media are facilitating both globalization and cultural hybridity, at times securing social cohesion and at other moments facilitating social movements for change. Where do these technologies come from? Who controls them? Who profits from them? How are they used, and with what potential implications? What does the future hold? These are some of the questions the class will address. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MFJS 2300 Media, Environment and Culture (4 Credits)
This course will provide an introduction to prominent questions and themes in environmental thought and how those questions and themes are addressed, mocked or reiterated through various media industries and outlets. It will begin with a study of various approaches to nature, wilderness and “environmentalisms”. It will also consider questions of environmental justice and multicultural approaches to environmental issues. Must have completed WRIT 1122 and WRIT 1133 or their equivalents.

MFJS 2400 Strategic Communication Planning (4 Credits)
This course introduces students to foundational principles in strategic communication and covers both public relations and advertising. Students learn and apply the elements of a comprehensive strategic communication plan, including conducting research, setting communication goals, designing messaging strategies and tactics, and evaluating the plan’s effectiveness. An emphasis on ethical communication practices is central to the course.

MFJS 2992 Directed Study (1-10 Credits)

MFJS 3020 Mass Communication Effects (4 Credits)
Behavioral science theory as applied to mass communications systems and audiences.

MFJS 3040 Media Law (4 Credits)
Law and regulation systems governing the mass media. Senior standing required.

MFJS 3110 Audience Research (4 Credits)
Analysis of behavioral research methods as applied to mass communication audiences.

MFJS 3120 Media Ethics (4 Credits)
Analysis of problems affecting mass communications profession that result from interaction among governmental, legal, institutional and socioeconomic forces in mass communications systems. Senior standing required.
MFJS 3140 Introduction to Publishing (4 Credits)
Through lectures and field trips, students learn how books get published—with all the steps involved. Cross listed with ENGL 2040, ENGL 3040.

MFJS 3150 Activist Media: A Historical Overview 1960-Present (4 Credits)
Today’s alternative cultures use internet and mobile technologies to access and circulate mainstream information, but also to rapidly exchange information that exists outside mainstream media channels. Activist movements today with access to digital tools and networks are no longer dependent on newspapers and broadcast networks to represent them and to disseminate their messages. We are, however, just beginning to see how the proliferation of alternative networks of communication, and the content, practices, and identities they facilitate, interact with traditional political and business organizations, as well as with traditional media products and practices. This course focuses on media activism over the past half-century tied to various social movements with an emphasis on contemporary protest movements and their use of new and old media tools and strategies. Cross listed with EDPX 3725, MFJS 4725. Prerequisite: junior standing or permission of instructor. MFJS, SCOM, MDST, COMN, JOUR, MCOM, IIC, or DMST majors only.

MFJS 3160 Networked Journalism (4 Credits)
This course traces the shift that has taken place over the past 15 years from mass-mediated journalism to networked journalism, with emphasis on experiments in citizen and participatory news and on the changing relationship between journalists and their publics. It explores emergent communication technologies and practices and how they are changing the news media landscape. Prerequisite: junior standing or permission of instructor. MFJS, SCOM, MDST, COMN, JOUR, MCOM, IIC, or DMST majors only.

MFJS 3201 Digital Graphic Design (4 Credits)
Students explore digital publication and graphic design, from printed layouts (newspaper and magazines) to digital packages (eBooks and mobile apps). Courses focuses on raster and vector tools to create effective presentations and user interfaces. Laboratory fee required. Prerequisite: MFJS 2140 and MFJS 2240.

MFJS 3203 Women and Film (4 Credits)
This course explores the major intersections of the terms “women” and “film.” It is concerned, for example, with the representation of women in film, both in the dominant Hollywood cinema and in alternative filmmaking practices (independent, experimental, documentary, and other national cinemas), with films by women and with women as cinema viewers or spectators. This course examines a variety of feminist approaches (historical, critical, theoretical) relevant to the subject matter. Lab fee. Cross listed with GWST 3203. Prerequisites: MFJS 200 or GWST 1112 or permission of instructor.

MFJS 3204 Film & Broadcast Documentary (4 Credits)
An historical study of documentary film and video, from the films of the Lumiere brothers to contemporary examples. Issues explored include: the nature of documentary and what distinguishes it from fiction, the development of documentary modes or styles, propaganda and ideology in documentary film, ethics, borderline forms that combine documentary and fiction, and documentary’s role in supporting established institutions and regimes and/or promoting social change. Lab fee required. Prerequisite: Permission of instructor.

MFJS 3205 International & Development Communication (4 Credits)
The course uses a variety of methods and approaches to inspire critical reflection about the complex relationship between communication, culture, media and globalization, (trans)national identity(ies) and development.

MFJS 3206 Film History I: Silent Cinema (4 Credits)
This course explores the international history of film, from the origins of cinema through the late silent period. We examine the ways in which important events such as massive immigration, the Progressive movement, colonialism, World War I, modernism, and the Bolshevik Revolution have altered the face of film history, and look at some of the most important cinematic movements of the period. We discuss film historiography and the special challenges posed by film historical research and writing. Lab fee required. Note: This course is writing-intensive. Prerequisite: Permission of the instructor.

MFJS 3208 Narrative and Longform Journalism (4 Credits)
Students spend time learning the nature and functions of in-depth news reporting for online and print, with a focus on magazine-style feature article writing and editing. Laboratory fee required. Prerequisite: MFJS 2140.

MFJS 3209 TV Culture & Criticism (4 Credits)
Theoretical and critical approaches to television, including semiotics, poststructuralism, ethnography; television programming from a cultural studies perspective. Laboratory fee required.

MFJS 3211 Tangible Interactivity (4 Credits)
Explores methods and devices for human-computer interaction beyond the mouse and keyboard. Students learn to create and hack electronic input and output devices and explore multi-touch, augmented reality, and other forms of sensor-based technologies. Prerequisite: MFJS 2110 or DMST 2100 or DMST 4100 or permission of instructor. MFJS, SCOM, MDST, COMN, MCOM, JOUR, IIC and DMST majors only.

MFJS 3212 Film History II: Sound Cinema (4 Credits)
This course explores the international history of film, from the development of sound cinema through the post-World War II period, 1926-1960. We examine the ways in which important events such as the Great Depression, the rise of fascism, the Second World War, and the Cold War have altered the face of film history, and look at some of the most important cinematic movements of the period. We discuss film historiography and the special challenges posed by film historical research and writing. Lab fee required. Prerequisite: Permission of the instructor.

MFJS 3215 Introduction to Field Production & Editing (4 Credits)
Application of video production principles and methods to multi-camera studio and field production. Laboratory fee required. Cross listed with MFJS 4470. Prerequisite: MFJS 2000.
**MFJS 3216 Film History III: Contemporary Cinema (4 Credits)**
This course explores the history of film from 1960 to the present. We examine the ways in which important events such as the Cold War, struggles against colonialism, the Vietnam War, globalization, and the rise of religious fundamentalisms have altered the face of film history and look at some of the most important cinematic movements of the period. We discuss film historiography and the special challenges posed by film historical research and writing. Note: Lab fee required. This course is writing-intensive. Lab fee required. Prerequisite: Permission of the instructor.

**MFJS 3218 Narrative Film/Video Production I (4 Credits)**
Technical and personnel management skills required for successful production of motion pictures and television programming. Cross listed with MFJS 4218. Prerequisites: MFJS 2000, MFJS 2150 and MFJS 3215.

**MFJS 3219 Documentary Film/Video Production I (4 Credits)**
The first half of a two-course sequence, this class focuses on the various modes and styles of documentary and on selecting and researching a topic for documentary production. Cross listed with MFJS 4219. Prerequisites: MFJS 2000 and MFJS 3215.

**MFJS 3220 Narrative Film/Video Production II (4 Credits)**
Application of film and video production techniques to creation of narrative/dramatic projects. Laboratory fee required. Cross listed with MFJS 4220. Prerequisites: MFJS 2150, MFJS 3215 and MFJS 3218.

**MFJS 3221 Documentary Film/Video Production II (4 Credits)**
The second half of a two course sequence, this class focuses on the production of a 10 minute documentary film. Cross listed with MFJS 4221. Prerequisites: MFJS 2000, MFJS 3215 and MFJS 3219.

**MFJS 3222 Experimental Film/Video Theory & Production (4 Credits)**
Historical, critical overview of experimental film/video movements; training in experimental production techniques; production of own experimental projects. Laboratory fee required. Cross listed with MFJS 4222. Prerequisite: MFJS 3215.

**MFJS 3223 Advanced Editing (4 Credits)**
Building on the basic non-linear editing skills gained in Introduction to Field Production & Editing, this course focuses on advanced techniques of image and color manipulation, movement and graphic effects, advanced sound sweetening and manipulation and advanced text/credit effects. Cross listed with MFJS 4223. Prerequisite: MFJS 3215.

**MFJS 3224 Introduction to 16mm Film and HD Digital Cinematography (4 Credits)**
This course focuses on the visual aspects of telling a cinematic Story. Students learn the basics of black and white cinematography using 16mm film cameras and/or the basics of color cinematography using high definition digital cameras. The class emphasizes silent storytelling, using lighting, art design and camera movement to develop character and theme. Students read from seminal film theorists about varying approaches to cinematography and write analyses of their own work. Lab fee required.

**MFJS 3229 Video Editing is for Everybody (4 Credits)**
The goal for this course is for students to have a basic working knowledge of editing using various media elements (video, audio, photos, music, graphics), developing proficiencies using different editing software, and applying a mixture of editing theories and techniques. This is a summer course only.

**MFJS 3230 Interaction and Collaboration (4 Credits)**
Students combine skills to create complex interactive works that encourage social collaboration of their users. Prerequisite: MFJS 3211 or DMST 3211 or DMST 3212 or DMST 3213 or permission of instructor. MFJS, SCOM, MDST, COMN, MCOM, JOUR, IIC, and DMST majors only. Can be repeated once.

**MFJS 3240 Film and Television Genres (4 Credits)**
The course explores the development and evolution of a particular film or television genre. Prerequisite: MFJS 2000.

**MFJS 3260 History of Photography: American Cultural Perspectives (4 Credits)**
The class will examine images and image-makers from various time periods throughout the history of (mostly) American photography, and will contextualize the production of the photographs with relevant historical and critical writings. Class time will be divided between slide lectures, film/video screenings, discussions of the readings and student presentations. We will also explore photojournalism in American media history including studying examples of photographs or movements that have influenced American society and culture.

**MFJS 3261 Green Screen: Cases and Concepts in Environmental Filmmaking (4 Credits)**
This seminar-style class will address what we call “environmental film” --how it is shaped and re-shaped by the changing cultural meanings of words like “ecology” “environmentalism” and “nature”. From the worlds of Walt Disney to Werner Herzog, from the avant-garde to Al Gore, this course will ask students to think about how cinema shapes what we see when we see “nature”, and how we think about, consume and politicize the environment of which we are an integral part. This seminar is primarily designed as a reading/viewing/discussion and writing course, but will also include a creative component in which students are encouraged to write, photograph, paint or film their own expressions of what “nature” and “the environment” or “environmentalist filmmaking” means to them. Prerequisites: WRIT 1122, WRIT 1133.

**MFJS 3301 Culture Jamming (4 Credits)**
Culture Jamming” describes a set of tactics that certain artists, activists, filmmakers, musicians and journalists use to subvert power structures through appropriation, re-use or re-contextualization of dominant media influences. Students study the cultural context of (to name just a few topics) graffiti art, musical mashups, the re-editing of film and video, flash mobs, media interventions, drop-lifting, and the critical graphic design and journalism of publications like Adbusters.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJS 3310</td>
<td>Advanced Newwriting &amp; Reporting (4 Credits)</td>
<td>Application of investigative techniques to interpretive reporting in areas of contemporary social concern. Laboratory fee required. Prerequisite: MFJS 2140.</td>
</tr>
<tr>
<td>MFJS 3320</td>
<td>Screenwriting for TV &amp; Film (4 Credits)</td>
<td>This course leads students through advanced scriptwriting formats based on instructor expertise. Lab fee required. Prerequisite: MFJS 2150.</td>
</tr>
<tr>
<td>MFJS 3330</td>
<td>Broadcast &amp; Video Journalism (4 Credits)</td>
<td>Students in this course learn and practice the techniques used by broadcast journalists as they write, shoot and edit news packages for television. Laboratory fee required. Prerequisite: MFJS 2140.</td>
</tr>
<tr>
<td>MFJS 3400</td>
<td>Public Relations Concepts &amp; Cases (4 Credits)</td>
<td>Public relations as practiced by business, government and nonprofit organizations with evaluation of applied public relations procedures. Prerequisite: MFJS 2140.</td>
</tr>
<tr>
<td>MFJS 3410</td>
<td>Strategic Messaging (4 Credits)</td>
<td>This course focuses on learning and applying strategic communication principles to the creation of strategic messages for a client. Students also evaluate strategic communication techniques as they learn how to target a specific audience and learn how strategic messages fit within an overall strategic communication plan. Prerequisite: MFJS 2400.</td>
</tr>
<tr>
<td>MFJS 3420</td>
<td>Strategic Communication Seminar (4 Credits)</td>
<td>This is the capstone course in the strategic communication sequence. In this course, students examine special topics in strategic communication and apply what they have learned to group projects in which they take on a client and work together as a team on a strategic communication campaign. Cross listed with MFJS 4070. Prerequisites: MFJS 2400 and MFJS 3410.</td>
</tr>
<tr>
<td>MFJS 3440</td>
<td>Global &amp; Multicultural Campaigns (4 Credits)</td>
<td>This course explores several issues and aspects of global and multicultural campaigns, using a combination of readings, lectures, discussions, and presentations from guest speakers with experience in this rapidly expanding field. Students discuss real-world campaigns and learn about the challenges and necessities of planning, implementing and evaluating global and multicultural campaigns. Prerequisite: MFJS 2400.</td>
</tr>
<tr>
<td>MFJS 3450</td>
<td>Web Design &amp; Content Development (4 Credits)</td>
<td>This course covers the building and management of web pages. Students must be comfortable planning, creating and integrating social media and third-party content into web sites, along with analytical tools that measure audience engagement. Laboratory fee required. Prerequisite: MFJS 2140 and MFJS 2240.</td>
</tr>
<tr>
<td>MFJS 3460</td>
<td>Advanced Web Building &amp; Site Management (4 Credits)</td>
<td>This course covers the concepts and tools utilized when building industry standard Rich Internet/Desktop Applications. During the course the student gets an introduction to Object Oriented development practices and how it applies to ActionScript 3.0 development for the Flash Player and Adobe Integrated Runtime platforms. The student is exposed to design patterns and frameworks that are commonly used during RIA development. During the course the student learns how data is handled in an RIA situation, covering such aspects and XML, AMF remoting, and local file storage. Flash, Flex, and AIR are all discussed and used during the course when building Rich Internet/Desktop Applications.</td>
</tr>
<tr>
<td>MFJS 3470</td>
<td>Advanced Multimedia Storytelling and Publishing (4 Credits)</td>
<td>In this course, students tap the reporting, writing, editing and multimedia production and editing skills and knowledge learned and practiced in previous journalism studies classes and apply them to building from scratch, an open content management based multimedia web site. Laboratory fee required. Prerequisites: MFJS 2140 and MFJS 2240.</td>
</tr>
<tr>
<td>MFJS 3480</td>
<td>Strategic Communication Seminar (4 Credits)</td>
<td>The goal of this course is to provide students with the fundamentals of planning and building web database applications using macromedia ColdFusion MX. Students will acquire a range of skills in planning, designing, developing and implementing a web database application. This course is focused on four core areas: Website Management, ColdFusion language, Database Design, and SQL. Prerequisite: DMST 3501 or MFJS 3501.</td>
</tr>
<tr>
<td>MFJS 3490</td>
<td>Digital Audio Production (4 Credits)</td>
<td>This class introduces the tools and techniques of digital audio production, including sampling and synthesis; sound editing and effects processing; multitrack recording; audio sequencing and mastering; and distribution.</td>
</tr>
<tr>
<td>MFJS 3500</td>
<td>Introduction to 3D Modeling (4 Credits)</td>
<td>This course will serve as an introduction to 3D modeling, texturing, and lighting on the computer. Students will complete a series of projects in which the processes of preparing and producing a 3D piece will be explored. Various strategies and techniques for creating detailed models to be used in animation and games will be examined. Additional attention will be spent on virtual camera techniques as well as the use of compositing in creating final pieces. Current trends in the field will be addressed through the analysis and discussion of current and historical examples. Prerequisites: MFJS 2110, DMST 2100, DMST 4100 or permission of instructor. Cross-listed with DMST 3600, DMST 3630, EDPX 3600, EDPX 4600, MCOM 3600, MFJS 3630. MFJS, SCOM, MDST, MCOM, IIC, JOUR, COMN and DMST majors only.</td>
</tr>
<tr>
<td>MFJS 3510</td>
<td>3D Animation and Character Animation (4 Credits)</td>
<td>This course examines animation within virtual 3D environments. Starting with basic concepts, the course develops timing and spacing principles in animation to support good mechanics. They also serve as the basis for the more advanced principles in character animation as the class progresses. Cross-listed with DMST 3600, DMST 3630, MCOM 3630. Prerequisite: MFJS 3600 or permission of instructor. MFJS, SCOM, MDST, COMN, MCOM, IIC, JOUR, and DMST majors only.</td>
</tr>
</tbody>
</table>
MFJS 3650 3D Spaces: Narratives, Games and Visualization (4 Credits)
An exploration of 3D digital space and the possibilities found in games, narratives and visualizations in these spaces. A real-time engine is used by students to examine the opportunities of virtual 3D worlds. Prerequisite: MFJS 3600 or DMST 3600 or permission of instructor. MFJS, SCOM, MDST, COMN, MCOM, IIC, JOUR or DMST majors only.

MFJS 3652 Culture, Gender, and Global Communication (4 Credits)
This course explores the ways in which culture, gender, and communication intersect and shape a variety of issues from an international and intercultural perspective. Using a global feminist perspective, it also focuses on paradigms and paradigm shifts in creating social change. Also explored are alternative paradigms of thought, action and media communications by women and indigenous peoples, which have often been ignored, discounted or buried in history. Cross listed with MFJS 4652 and GWST 3652.

MFJS 3655 Multicultural Journalism (4 Credits)
This course focuses on multicultural approaches to journalism and media, including representations and news coverage related to gender, race/ethnicity, class, and sexuality, disabilities, religion, and nationality, etc.. The class explores culture and intercultural communication and ways to apply these to journalistic writing as a creative process and craft. Prerequisite: MFJS 2140: News Writing & Reporting. Cross-listed with MFJS 4655.

MFJS 3690 Digital Cinema, Theory and Practice (4 Credits)
This course introduces such forms of digital cinema as video remixes and cinemashups, visual music, ambient video, sonic visualization; live cinema and VJing. The class covers multitrack video and audio mixing, with an emphasis on live, performative approaches, including VJ tools and a variety of systematic approaches to making computer-generated or manipulated video. The class incorporates reading and discussion of several critical texts and documentation of digital cinematic theory, process and practices, and the class will include screening and discussion of examples of digital cinema. Prerequisite: Permission of instructor. MFJS, SCOM, MDST, COMN, MCOM, IIC, JOUR, or DMST majors only.

MFJS 3700 New Media Law & Regulation (4 Credits)
An examination of recent conflicts in mass communication law; topics vary with current developments. Particular emphasis is given to the legal problems of broadcasting, cable and the new communications technologies.

MFJS 3802 Topics in Communication (1-4 Credits)
MFJS 3803 Topics in Communication (1-4 Credits)
MFJS 3804 Topics in Communication (1-4 Credits)
MFJS 3850 TV & Film Production: Hollywood View (4 Credits)
MFJS 3852 Advanced Design, Layout, and Editing (4 Credits)
This course teaches students advanced layout and design for media publications using contemporary software applications for journalists and public relations professionals.

MFJS 3880 On Campus Media Internship (1-4 Credits)
This course gives students an opportunity to hone their writing and editing skills under the tutelage of their instructors and their peers in the publication/dissemination of a campus-based news source that includes online news, print, video, photojournalism, audio, and/or design. Prerequisite: MFJS 2140.

MFJS 3900 Topics in Mass Communications (1-4 Credits)
MFJS 3980 Internship in Mass Communication (1-10 Credits)
MFJS 3991 Independent Study (1-10 Credits)
MFJS 3992 Directed Study (1-5 Credits)
MFJS 3995 Independent Research (1-10 Credits)

Lamont School of Music
Office: Newman Performing Arts Center
Mail Code: 2344 E. Iliff Ave. Denver, CO 80208
Phone: 303-871-6400
Web Site: http://www.du.edu/lamont

With its wide array of degrees and certificates, outstanding faculty and superior new facilities, the Lamont School of Music is one of the most distinguished music programs in the United States.

The Lamont School of Music offers bachelor of music programs with majors in composition, jazz studies and commercial music, performance, and recording and production, as well as a bachelor of arts in music.

The faculty is composed of professors and instructors who actively perform, compose, publish, and lecture worldwide. The Lamont School of Music is located in the Robert and Judi Newman Center for the Performing Arts, a 186,000-square-foot state-of-the-art facility opened in 2002 and officially inaugurated in 2003. The Newman Center includes an academic building, a 225-seat recital hall, a 1,000-seat concert/opera hall and a 250-seat flexible theater. The academic building is replete with teaching studios, practice rooms (some of which are digitally enhanced as “virtual” acoustic practice.
rooms), large rehearsal spaces, a music library, a digital keyboard laboratory, two recording studios, an electronic music lab, classrooms with smart-to-the-seat technology and an 80-seat recital salon.

**Music**

**Bachelor of Arts Major Requirements**

(183 credits required for the degree) (p. 38)

70 credits, including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 1001</td>
<td>Music Theory I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MUAC 1002</td>
<td>and Music Theory I</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 1003</td>
<td>and Music Theory I</td>
<td></td>
</tr>
<tr>
<td>MUAC 1020</td>
<td>Aural Skills I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MUAC 1021</td>
<td>and Aural Skills I</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 1022</td>
<td>and Aural Skills I</td>
<td></td>
</tr>
<tr>
<td>MUAC 2004</td>
<td>Music Theory II</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MUAC 2005</td>
<td>and Music Theory II</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 2006</td>
<td>and Music Theory II</td>
<td></td>
</tr>
<tr>
<td>MUAC 2020</td>
<td>Aural Skills II</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MUAC 2021</td>
<td>and Aural Skills II</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 2022</td>
<td>and Aural Skills II</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUAC 1013</td>
<td>Jazz Theory and Aural Skills</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 1014</td>
<td>and Jazz Theory and Aural Skills</td>
<td></td>
</tr>
<tr>
<td>&amp; MUAC 1015</td>
<td>and Jazz Theory and Aural Skills</td>
<td></td>
</tr>
<tr>
<td>MUAC 3870</td>
<td>Jazz Improvisation &amp; Composition</td>
<td></td>
</tr>
<tr>
<td>&amp; 3870</td>
<td>and Jazz Improvisation &amp; Composition</td>
<td></td>
</tr>
<tr>
<td>&amp; 3870</td>
<td>and Jazz Improvisation &amp; Composition</td>
<td></td>
</tr>
<tr>
<td>MUAC 1211</td>
<td>Music Technology</td>
<td>4</td>
</tr>
<tr>
<td>MUAC 2051</td>
<td>Musicology: Foundations of Musicology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select five additional 2000-level musicology courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 2052</td>
<td>Musicology: Medieval And Renaissance Music</td>
</tr>
<tr>
<td>MUAC 2053</td>
<td>Musicology: Baroque Music</td>
</tr>
<tr>
<td>MUAC 2054</td>
<td>Musicology: Classical Music</td>
</tr>
<tr>
<td>MUAC 2055</td>
<td>Musicology: Romantic Music</td>
</tr>
<tr>
<td>MUAC 2056</td>
<td>Musicology: Modern Music</td>
</tr>
<tr>
<td>MUAC 2057</td>
<td>Musicology: Introduction to World Musics</td>
</tr>
<tr>
<td>MUAC 2058</td>
<td>Jazz and Commercial Music History and Repertoire I (1900-1955)</td>
</tr>
<tr>
<td>MUAC 2059</td>
<td>Jazz and Commercial Music History and Repertoire II (1955-Present)</td>
</tr>
<tr>
<td>MUPR (2000-level)</td>
<td>Applied lessons on major instrument with assigned instructor (2 credits per quarter)</td>
</tr>
<tr>
<td>MUEN (3000 level)</td>
<td>Ensembles as assigned</td>
</tr>
</tbody>
</table>

Total Credits 70

In addition, students must meet piano proficiency and culminating project requirements. Piano proficiency must be completed by the end of sophomore year.

**Secondary Major Requirements**

70 credits. Same requirements as for BA degree.

**Minor Requirements**

23 credits, including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 1001</td>
<td>Music Theory I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUAC 1002</td>
<td>and Music Theory I</td>
<td></td>
</tr>
</tbody>
</table>
MUAC 1020 & MUAC 1021  Aural Skills I and Aural Skills I $^1$ 4
OR
MUAC 1013 & MUAC 1014  Jazz Theory and Aural Skills and Jazz Theory and Aural Skills
Select two of the following: 6
MUAC 2051  Musicology: Foundations of Musicology
MUAC 2052  Musicology: Medieval And Renaissance Music
MUAC 2053  Musicology: Baroque Music
MUAC 2054  Musicology: Classical Music
MUAC 2055  Musicology: Romantic Music
MUAC 2056  Musicology: Modern Music
MUAC 2057  Musicology: Introduction to World Musics
MUAC 2058  Jazz and Commercial Music History and Repertoire I (1900-1955)
MUAC 2059  Jazz and Commercial Music History and Repertoire II (1955-Present)
MUPR (2000-level)  Applied studio lessons (2 credits per quarter) 6
MUEN (3000-level)  Ensembles 3
Total Credits 23

$^1$ Eight credits to be taken in the fall and winter quarters

Note: Prior to beginning a minor in music, students must complete the following:

- an audition with the appropriate music faculty;
- the theory and aural skills placement exam which is only given the week before fall quarter classes begin. (Contact the student coordinator at the Lamont School of Music for more information.)

**Composition**

**Bachelor of Music Major Requirements**

(194 credits required for the degree) (p. 39)

132 credits, including the following:

MUAC 1001 & MUAC 1002 & MUAC 1003  Music Theory I and Music Theory I and Music Theory I 6
MUAC 1020 & MUAC 1021 & MUAC 1022  Aural Skills I and Aural Skills I and Aural Skills I 6
MUAC 2020 & MUAC 2021 & MUAC 2022  Aural Skills II and Aural Skills II and Aural Skills II 6
MUAC 1920  Basic Conducting 2
MUAC 1211  Music Technology 4
MUAC 2051  Musicology: Foundations of Musicology 3

Select five additional 2000-level musicology courses from the following: 15
MUAC 2052  Musicology: Medieval And Renaissance Music
MUAC 2053  Musicology: Baroque Music
MUAC 2054  Musicology: Classical Music
MUAC 2055  Musicology: Romantic Music
MUAC 2056  Musicology: Modern Music
MUAC 2057  Musicology: Introduction to World Musics
Jazz Studies and Commercial Music

Bachelor of Music Major Requirements

(194 credits required for the degree) (p. 39)

132 credits, including the following:

MUAC 1013 Jazz Theory and Aural Skills 12
& MUAC 1014 and Jazz Theory and Aural Skills
& MUAC 1015 and Jazz Theory and Aural Skills
MUAC 3870 Jazz Improvisation & Composition 12
& 3870 and Jazz Improvisation & Composition
& 3870 and Jazz Improvisation & Composition (4 credits per quarter for 3 quarters)
MUAC 1920 Basic Conducting 2
MUAC 1211 Music Technology 4
MUAC 2051 Musicology: Foundations of Musicology 3
MUAC 2058 Jazz and Commercial Music History and Repertoire I (1900-1955) 6
& MUAC 2059 and Jazz and Commercial Music History and Repertoire II (1955-Present)

Select three additional 2000-level musicology courses from the following: 9

MUAC 2052 Musicology: Medieval And Renaissance Music
MUAC 2053 Musicology: Baroque Music
MUAC 2054 Musicology: Classical Music
MUAC 2055 Musicology: Romantic Music
MUAC 2056 Musicology: Modern Music
MUAC 2057 Musicology: Introduction to World Musics

Area Requirements 12

In addition, students must meet piano proficiency; sophomore proficiency; and performance of a new work on the Lamont Composers Concert once per quarter (1st quarter exception). Piano proficiency must be completed by the end of sophomore year.
MUAC 1190  Jazz at the Keyboard
MUAC 3092  The Business Side of Music

And choose from the following to complete additional four credits:
MUAC 3069  Jazz Rhythm Section
MUAC 3980  Advanced Jazz Improvisation and Composition
MUAC 3830  Jazz and Commercial Music Orchestration and Arranging
MUAC 3831  Jazz and Commercial Music Orchestration and Arranging
MUAC 3832  Jazz and Commercial Music Orchestration and Arranging
MUAC 3061  Audio Production I (Instructor permission required)
MUAC 3010  Tonal Counterpoint
MUPR 2XXX  Applied Lessons
MUEN 3XXXX  Applied Ensemble
MUAC 3059  Audio Production II
& MUAC 3058  and Audio Production III
& MUAC 3064  and Audio Production IV
& MUAC 3065  and Audio Production V
& MUAC 3066  and Audio Production VI (Instructor permission required for any audio production course beyond MUAC 3061)
MUPR (2000-level)  Applied lessons on major instrument with assigned instructor (4 credit per quarter)  48
MUEN (3000-level)  Ensembles  24

Total Credits  132

In addition, students must meet piano proficiency; sophomore performance proficiency; junior recital and senior recital requirements. Piano proficiency must be completed by the end of sophomore year.

Certificate Requirements

24 credits as follows:

Applied lessons on major instruments  6
Ensembles (as assigned by dept. chair)  6
Electives  12

Choose from the following
MUAC 1190  Jazz at the Keyboard
MUAC 3860  Basic Jazz Improvisation
MUAC 3870  Jazz Improvisation & Composition
MUAC 3980  Advanced Jazz Improvisation and Composition
MUAC 3830  Jazz and Commercial Music Orchestration and Arranging
MUAC 3831  Jazz and Commercial Music Orchestration and Arranging
MUAC 3832  Jazz and Commercial Music Orchestration and Arranging

Total Credits  24

Performance

Bachelor of Music Major Requirements

(194 credits required for the degree) (p. 39)

132 credits, including the following:

MUAC 1001  Music Theory I  6
& MUAC 1002  and Music Theory I
& MUAC 1003  and Music Theory I
MUAC 1020  Aural Skills I  6
& MUAC 1021  and Aural Skills I
& MUAC 1022  and Aural Skills I
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 2020 &amp; MUAC 2021 &amp; MUAC 2022</td>
<td>Aural Skills II and Aural Skills II</td>
<td>6</td>
</tr>
<tr>
<td>MUAC 1920</td>
<td>Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 1211</td>
<td>Music Technology</td>
<td>4</td>
</tr>
<tr>
<td>MUAC 2051</td>
<td>Musicology: Foundations of Musicology</td>
<td>3</td>
</tr>
<tr>
<td>MUAC 2052</td>
<td>Musicology: Medieval And Renaissance Music</td>
<td></td>
</tr>
<tr>
<td>MUAC 2053</td>
<td>Musicology: Baroque Music</td>
<td></td>
</tr>
<tr>
<td>MUAC 2054</td>
<td>Musicology: Classical Music</td>
<td></td>
</tr>
<tr>
<td>MUAC 2055</td>
<td>Musicology: Romantic Music</td>
<td></td>
</tr>
<tr>
<td>MUAC 2056</td>
<td>Musicology: Modern Music</td>
<td></td>
</tr>
<tr>
<td>MUAC 2057</td>
<td>Musicology: Introduction to World Musics</td>
<td></td>
</tr>
<tr>
<td>MUAC 2058</td>
<td>Jazz and Commercial Music History and Repertoire I (1900-1955)</td>
<td></td>
</tr>
<tr>
<td>MUAC 2059</td>
<td>Jazz and Commercial Music History and Repertoire II (1955-Present)</td>
<td></td>
</tr>
<tr>
<td>MUPR (2000-level)</td>
<td>Applied lessons with assigned instructor (4 credits per quarter)</td>
<td>48</td>
</tr>
<tr>
<td>MUEN (3000-level)</td>
<td>Ensembles</td>
<td>24</td>
</tr>
</tbody>
</table>

**Area requirements listed below by department**

**Brass**

- **Horn**
  - MUAC 3708 | Pedagogy & Repertoire Horn
  - MUAC 3765 | Professional Brass Techniques (To be taken senior year, unless otherwise approved by department)
- Any MUAC, MUEN, MUPR course(s) to be approved by studio professor totaling four credits

- **Trombone**
  - MUAC 3712 | Pedagogy & Repertoire Trombone
  - MUAC 3765 | Professional Brass Techniques (To be taken senior year, unless otherwise approved by department)
- Any MUAC, MUEN, MUPR course(s) to be approved by studio professor totaling four credits

- **Trumpet**
  - MUAC 3742 | Pedagogy & Repertoire Trumpet
  - MUAC 3765 | Professional Brass Techniques (To be taken senior year, unless otherwise approved by department)
- Any MUAC, MUEN, MUPR course(s) to be approved by studio professor totaling four credits

- **Tuba**
  - MUAC 3706 | Pedagogy & Repertoire Tuba
  - MUAC 3765 | Professional Brass Techniques (To be taken senior year, unless otherwise approved by department)
- Any MUAC, MUEN, MUPR course(s) to be approved by studio professor totaling four credits

**Carillon**

- MUAC 3710 | Carillon Pedagogy I
- MUAC 3698 | Carillon History and Mechanics (To be taken over two quarters)

**Guitar**

- MUAC 3724 | Pedagogy & Repertoire Guitar (To be taken over two quarters)
- MUAC 3590 | Guitar History

**Harp**

- MUAC 3735 | Pedagogy & Repertoire Harp
  & MUAC 3736 | and Pedagogy & Repertoire Harp
- Any MUAC, MUEN, MUPR course(s) to be approved by studio professor totaling four credits

**Musical Theater**

Choose from the following to equal 12 credits:

- THEA 2870 | Acting I
- THEA 2871 | Acting I
- THEA 1010 | Stage Movement & Dance
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1011</td>
<td>Stage Movement &amp; Dance</td>
</tr>
<tr>
<td>THEA 1012</td>
<td>Stage Movement &amp; Dance</td>
</tr>
<tr>
<td>MUAC 3165</td>
<td>Music Theater Survey</td>
</tr>
<tr>
<td>MUAC 3492</td>
<td>History of Opera: From Monteverdi to Minimalism and Beyond</td>
</tr>
<tr>
<td>MUAC 3240</td>
<td>Vocal Pedagogy</td>
</tr>
<tr>
<td>MUAC 3686</td>
<td>Choral Pedagogy I</td>
</tr>
<tr>
<td>&amp; MUAC 3688</td>
<td>and Choral Pedagogy II</td>
</tr>
<tr>
<td>MUAC 3684</td>
<td>Choral Literature I</td>
</tr>
<tr>
<td>&amp; MUAC 3689</td>
<td>and Choral Literature II</td>
</tr>
</tbody>
</table>

**Organ**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3738</td>
<td>Pedagogy &amp; Repertoire Organ</td>
</tr>
<tr>
<td>&amp; MUAC 3739</td>
<td>and Pedagogy &amp; Repertoire Organ</td>
</tr>
<tr>
<td>&amp; MUAC 3740</td>
<td>and Pedagogy &amp; Repertoire Organ</td>
</tr>
<tr>
<td>MUPR 3350</td>
<td>Organ Improvisation (to be taken for 3 quarters)</td>
</tr>
</tbody>
</table>

**Percussion**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3717</td>
<td>Pedagogy &amp; Repertoire Percussion</td>
</tr>
<tr>
<td>&amp; MUAC 3718</td>
<td>and Pedagogy &amp; Repertoire Percussion</td>
</tr>
</tbody>
</table>

Choose from the following to total 4 credits:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3860</td>
<td>Basic Jazz Improvisation</td>
</tr>
<tr>
<td>MUPR 2661</td>
<td>Percussion Set (Or Percussion Hand Drum Lessons)</td>
</tr>
<tr>
<td>or MUPR 2671</td>
<td>Percussion Set</td>
</tr>
</tbody>
</table>

**Piano**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 2820</td>
<td>Introduction to Piano Pedagogy I</td>
</tr>
<tr>
<td>&amp; MUAC 2821</td>
<td>and Introduction to Piano Pedagogy II</td>
</tr>
<tr>
<td>MUAC 3822</td>
<td>Piano Repertoire I</td>
</tr>
<tr>
<td>&amp; MUAC 3823</td>
<td>and Piano Repertoire II</td>
</tr>
<tr>
<td>&amp; MUAC 3824</td>
<td>and Piano Repertoire III</td>
</tr>
</tbody>
</table>

**Strings**

**Bass**

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3733</td>
<td>Pedagogy &amp; Rep Double Bass</td>
</tr>
<tr>
<td>MUAC 3655</td>
<td>Orchestral Excerpts-Bass</td>
</tr>
<tr>
<td>MUAC 3030</td>
<td>Seminar-Performance Psychology</td>
</tr>
<tr>
<td>MUAC 3860</td>
<td>Basic Jazz Improvisation</td>
</tr>
<tr>
<td>MUAC 3092</td>
<td>The Business Side of Music</td>
</tr>
<tr>
<td>MUPR 3120</td>
<td>Alexander Technique</td>
</tr>
<tr>
<td>MUAC 3061</td>
<td>Audio Production I (Instructor Permission Required)</td>
</tr>
<tr>
<td>MUAC 3XXX</td>
<td>Composition, Ethnomusicology, Musicology, or Theory course</td>
</tr>
</tbody>
</table>

**Cello**

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3730</td>
<td>Pedagogy &amp; Repertoire Cello</td>
</tr>
<tr>
<td>MUAC 3463</td>
<td>Suzuki Cello Seminar I</td>
</tr>
<tr>
<td>MUAC 3464</td>
<td>Suzuki Cello Seminar I</td>
</tr>
<tr>
<td>MUAC 3465</td>
<td>Suzuki Cello Seminar I</td>
</tr>
<tr>
<td>MUAC 3466</td>
<td>Suzuki Cello Seminar II</td>
</tr>
<tr>
<td>MUAC 3467</td>
<td>Suzuki Cello Seminar II</td>
</tr>
<tr>
<td>MUAC 3467</td>
<td>Suzuki Cello Seminar II</td>
</tr>
<tr>
<td>MUAC 3468</td>
<td>Suzuki Cello Seminar II</td>
</tr>
<tr>
<td>MUAC 3650</td>
<td>Orchestral Excerpts-Cello</td>
</tr>
<tr>
<td>MUAC 3030</td>
<td>Seminar-Performance Psychology</td>
</tr>
<tr>
<td>MUAC 3860</td>
<td>Basic Jazz Improvisation</td>
</tr>
<tr>
<td>MUAC 3092</td>
<td>The Business Side of Music</td>
</tr>
<tr>
<td>MUPR 3120</td>
<td>Alexander Technique</td>
</tr>
<tr>
<td>MUAC 3061</td>
<td>Audio Production I (Instructor Permission Required)</td>
</tr>
<tr>
<td>MUAC 3XXX</td>
<td>Composition, Ethnomusicology, Musicology, or Theory course</td>
</tr>
</tbody>
</table>

**Viola**

| MUAC 3661 | Orchestral Excerpts Viola (Two quarter sequence - Winter and Spring every even year) |
| MUAC 3030 | Seminar-Performance Psychology |
| MUAC 3860 | Basic Jazz Improvisation |
| MUAC 3092 | The Business Side of Music |
| MUPR 3120 | Alexander Technique |
| MUAC 3061 | Audio Production I (Instructor Permission Required) |
| MUAC 3XXX | Composition, Ethnomusicology, Musicology, or Theory course |

**Violin**

| MUAC 3470 | Suzuki Violin Seminar I |
| MUAC 3471 | Suzuki Violin Seminar I |
| MUAC 3472 | Suzuki Violin Seminar I |
| MUAC 3660 | Orchestral Excerpts-Violin |
| MUAC 3030 | Seminar-Performance Psychology |
| MUAC 3860 | Basic Jazz Improvisation |
| MUAC 3092 | The Business Side of Music |
| MUPR 3120 | Alexander Technique |
| MUAC 3061 | Audio Production I |
| MUAC (3000-level) | Composition, Ethnomusicology, Musicology, or Theory course |

**Voice**

| MUAC 1700 | Lyric Diction-English/Italian |
| MUAC 1701 | Lyric Diction:German/French |
| MUAC 2412 | Vocal Literature Survey |
| MUAC 3106 | The Dynamic Body: Foundations in Movement Methods and Body Awareness Principles |

Choose from the following to finish 12 credits:

| MUAC 3240 | Vocal Pedagogy |
| MUAC 3686 | Choral Pedagogy I and Choral Pedagogy II |
| MUAC 3684 | Choral Literature I and Choral Literature II |
| MUAC 3689 | Choral Literature I and Choral Literature II |

**Woodwinds**

Choose from the following depending on your instrument:

**Bassoon**

| MUAC 3761 | Pedagogy & Repertoire Bassoon |
| MUAC 3762 | Pedagogy & Repertoire Bassoon |

Choose from the following to complete 12 credits:

| MUAC 3860 | Basic Jazz Improvisation |
| MUAC 3030 | Seminar-Performance Psychology and Alexander Technique |

**Clarinet**

| MUAC 3751 | Pedagogy & Repertoire Clarinet and Pedagogy & Repertoire Clarinet |

Choose from the following to complete 12 credits:

| MUAC 3860 | Basic Jazz Improvisation |
| MUAC 3030 | Seminar-Performance Psychology and Alexander Technique |

**Flute**

| MUAC 3747 | Pedagogy & Repertoire Flute and Pedagogy & Repertoire Flute |

Choose from the following to complete 12 credits:

| MUAC 3860 | Basic Jazz Improvisation |
MUAC 3030 & MUPR 3120  Seminar-Performance Psychology and Alexander Technique
Oboe
MUAC 3757 & MUAC 3758  Pedagogy & Repertoire Oboe
Choose from the following to complete 12 credits:
MUAC 3860  Basic Jazz Improvisation
MUAC 3030 & MUPR 3120  Seminar-Performance Psychology and Alexander Technique
Saxophone
MUAC 3753 & MUAC 3754  Pedagogy & Repertoire Saxophone
Choose from the following to complete 12 credits:
MUAC 3860  Basic Jazz Improvisation
MUAC 3030 & MUPR 3120  Seminar-Performance Psychology and Alexander Technique

In addition, students must meet piano proficiency; sophomore performance proficiency; junior recital and senior recital requirements. Piano proficiency must be completed by the end of sophomore year.

Concentrations are available for this major in the following areas: bass, bassoon, cello, clarinet, euphonium, flute, guitar, harp, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, and voice.

**Artist Diploma (Certificate in music)**

With a minimum of academic requirements, the AD is ideal for highly accomplished instrumentalists and vocalists determined to pursue a solo career. Because studios are kept small, all AD students study individually with faculty and enjoy a wealth of performance time. A completed high school diploma is required for admission. Competitive applicants will have extensive performance experience.

**Certificate requirements**

**Coursework requirements**

**Core coursework requirements**

Complete all of the following courses:

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC, MUPR, MUEN (3000 or 4000-level)</td>
<td>9</td>
</tr>
<tr>
<td>MUPR (4000-level) Applied Lessons (2 credits per quarter)</td>
<td>12</td>
</tr>
<tr>
<td>MUEN (3000-level) Ensemble/Chamber Music</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: These are minimum hours required. Candidates must enroll for at least one credit hour per quarter for each quarter of study and participate in at least two ensembles per quarter of study.

**Total Credits**

Minimum number of credits required for the certificate: 27 credits

**Non-coursework requirements**

- Perform 3 juried, full-length solo recitals.
- Participate in ensemble/chamber music activities as determined by specific department of enrollment.
- Instrumentalists and vocalists: Participate in the Lamont Honors Competitions (concerto and chamber music) at least once during enrollment in the program.

**Recording and Production**

**Bachelor of Music Major Requirements**

(194 credits required for the degree) (p. 39)

128 credits, including the following:
MUAC 1001 & MUAC 1002 & MUAC 1003
Music Theory I and Music Theory I
MUAC 1020 & MUAC 1021 & MUAC 1022
Aural Skills I and Aural Skills I
Music Theory II and Music Theory II
MUAC 2020 & MUAC 2021 & MUAC 2022
Aural Skills II and Aural Skills II
OR:
MUAC 1013 & MUAC 1014 & MUAC 1015
Jazz Theory and Aural Skills and Jazz Theory and Aural Skills
MUAC 3870 & 3870 & 3870
Jazz Improvisation & Composition and Jazz Improvisation & Composition
MUAC 2051
Musicology: Foundations of Musicology
Select five additional 2000-level musicology courses from the following:
MUAC 2052
Musicology: Medieval And Renaissance Music
MUAC 2053
Musicology: Baroque Music
MUAC 2054
Musicology: Classical Music
MUAC 2055
Musicology: Romantic Music
MUAC 2056
Musicology: Modern Music
MUAC 2057
Musicology: Introduction to World Musics
MUAC 2058
Jazz and Commercial Music History and Repertoire I (1900-1955)
MUAC 2059
Jazz and Commercial Music History and Repertoire II (1955-Present)
MUAC 1920
Basic Conducting
MUAC 2067 & 2067 & 2067 & 2067 & 2067 & 2067
Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum
MUPR (2000-level)
Applied lessons with assigned instructor (4 credits per quarter)
MUAC 2067 & 2067 & 2067 & 2067 & 2067 & 2067
Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum and Audio Practicum
MUEN (3000-level)
Ensembles
Total Credits
In addition, students must meet piano proficiency; sophomore music recording proficiency exam; senior production project (approved by department); and complete an internship (approved by department chair - must complete audio production course sequence before beginning internship). Piano proficiency must be completed by the end of sophomore year.
Suzuki Pedagogy

Certificate Program

The Suzuki pedagogy certificate program provides an opportunity for violin and cello teachers to pursue comprehensive, long-term study of the Suzuki Method with internationally known master teachers. The successful completion of both level of this program entitles the participants to receive a Suzuki pedagogy certificate for that level from the University of Denver.

**CELLO**

**LEVEL 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3463</td>
<td>Suzuki Cello Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3464</td>
<td>Suzuki Cello Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3465</td>
<td>Suzuki Cello Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3460</td>
<td>Suzuki Cello Practicum</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3461</td>
<td>Suzuki Cello Practicum</td>
<td></td>
</tr>
<tr>
<td>or MUAC 3462</td>
<td>Suzuki Cello Practicum</td>
<td></td>
</tr>
<tr>
<td>MUAC 3439</td>
<td>Teaching Note Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

**LEVEL 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3466</td>
<td>Suzuki Cello Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3467</td>
<td>Suzuki Cello Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3468</td>
<td>Suzuki Cello Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3460</td>
<td>Suzuki Cello Practicum</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3461</td>
<td>Suzuki Cello Practicum</td>
<td></td>
</tr>
<tr>
<td>or MUAC 3462</td>
<td>Suzuki Cello Practicum</td>
<td></td>
</tr>
<tr>
<td>MUAC 4450</td>
<td>Suzuki Group Lesson Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credits** 18

**VIOLIN**

**LEVEL 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3470</td>
<td>Suzuki Violin Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3471</td>
<td>Suzuki Violin Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3472</td>
<td>Suzuki Violin Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3477</td>
<td>Suzuki Violin Practicum</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3478</td>
<td>Suzuki Violin Practicum</td>
<td></td>
</tr>
<tr>
<td>or MUAC 3479</td>
<td>Suzuki Violin Practicum</td>
<td></td>
</tr>
<tr>
<td>MUAC 3439</td>
<td>Teaching Note Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

**LEVEL 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAC 3282</td>
<td>Suzuki Violin Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3283</td>
<td>Suzuki Violin Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3284</td>
<td>Suzuki Violin Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>MUAC 3477</td>
<td>Suzuki Violin Practicum</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3478</td>
<td>Suzuki Violin Practicum</td>
<td></td>
</tr>
<tr>
<td>or MUAC 3479</td>
<td>Suzuki Violin Practicum</td>
<td></td>
</tr>
<tr>
<td>MUAC 4450</td>
<td>Suzuki Group Lesson Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credits** 18

**PARTICIPATION, ATTENDANCE AND EXAMINATION REQUIREMENTS**

Admission and Audition Requirements

In addition to being accepted for study by the University, students desiring admission to the Lamont School of Music must audition with the appropriate music faculty and complete a Lamont application. Audition requirements differ by area. Requirements can be reviewed on the Lamont School of Music website. An in-person audition is preferable; however, students may submit a high quality video recording for review.
Participation, Attendance and Examination Requirements

Performance Juries
To ensure students are progressing appropriately on their major instrument, juries are given at least once a year but may be held every quarter depending on the department. Contact the appropriate faculty member for more details.

Sophomore Proficiency Examination
The sophomore proficiency examination is designed to determine if a student is prepared to continue in the BM degrees. The student will play a jury for a faculty committee. The committee will provide written comments to the student and a majority decision will rule whether or not the student passes the examination.

Ensemble Participation
All full-time Bachelor of Music students majoring in Performance and in Jazz Studies and Commercial music must participate in a minimum of two major ensembles per quarter as assigned. All full-time Bachelor of Music students majoring in Composition and Recording and Production must participate in one ensemble per quarter as assigned. Full-time Bachelor of Arts students and part-time students must participate in one major ensemble per quarter as assigned.

Recitals for Bachelor of Performance Majors and for Jazz Studies and Commercial Music Majors
The specific requirements are as follows:
- Bachelor of Music in performance, concentration in classical piano—half recital in sophomore year, full recital in junior year, full recital in senior year
- Bachelor of Music in performance and in jazz studies and commercial music, all other emphases —half recital in junior, full recital in senior year

Piano Proficiency Examination
All Bachelor of Music and Bachelor of Arts students must pass piano proficiency requirements designated for their degrees no later than one quarter before graduation. This is not required of piano concentrations.

Theory and Aural Skills Placement Examination
All music students must take the theory and aural skills placement examination, which is only given the week before fall quarter classes begin.

Convocation Attendance
All Bachelor of Music and Bachelor of Arts students must attend three convocations per quarter. These are scheduled throughout the quarter on a Friday between 2:30 and 4pm. Visit the Lamont website for dates.

Music-Academic Classes Courses
MUAC 1001 Music Theory I (2 Credits)
MUAC 1002 Music Theory I (2 Credits)
MUAC 1003 Music Theory I (2 Credits)
MUAC 1012 Music, Society, and Culture (4 Credits)
This course introduces students to the music of three world areas: Bali, Mexico-America, and South India. For each of these units, students examine a diverse array of genres, analyzing music's relationship to religious life, aesthetics, politics, social organization, and identity. We also discuss the impact of globalization, transnationalism and immigration on the shaping and transformation of musical practice and meaning in each region. Reading materials, listening assignments, and discussion topics are supplemented by in-class performance workshops, designed to give students firsthand experience in non-Western performance traditions. This course counts toward the Analytical Inquiry: Society and Culture requirement.
MUAC 1013 Jazz Theory and Aural Skills (4 Credits)
The foundational study of jazz theory and aural skills. Must be a BM student with a major in Jazz Studies or Commercial Music.
MUAC 1014 Jazz Theory and Aural Skills (4 Credits)
The foundational study of jazz theory and aural skills.
MUAC 1015 Jazz Theory and Aural Skills (4 Credits)
The foundational study of jazz theory and aural skills.
MUAC 1016 History of Jazz (4 Credits)
This course examines the short history of jazz and all its sub-styles (swing, bop, cool, etc.) from its roots to the early eighties. Students have access to the entire course online, including all the fantastic listening. This course counts toward the Analytical Inquiry: Society and Culture requirement. Note: Music majors do not receive Common Curriculum credit for this course.
MUAC 1017 History of Rock and Roll (4 Credits)
The “birth of rock” occurred in the mid 1950’s as a result of the convergence of pop, country and western, and rhythm and blues. This course traces that evolution by way of examining a broad picture of the general flow of those styles and their artists. This course counts toward the Analytical Inquiry: Society and Culture requirement. Note: Music majors do not receive Common Curriculum credit for this course.

MUAC 1018 Understanding Music (4 Credits)
In this course, students acquire a greater appreciation of musical history, context, composers, and genres. Through listening activities, texts, movies, and live concerts, students become educated listeners, able to describe intelligently musical experiences using appropriate vocabulary. This course counts toward the Analytical Inquiry: Society and Culture requirement. Note: Music majors do not receive Common Curriculum credit for this course.

MUAC 1019 American Popular Music (4 Credits)
American Popular Music combines the study of social and cultural history on the one hand with the analytical study of music styles on the other. Basically, it serves as an introduction to the wealth of American popular music from minstrelsy to hip hop. This course counts toward the Analytical Inquiry: Society and Culture requirement. This class is not available to music or performance majors.

MUAC 1020 Aural Skills I (2 Credits)
Development of aural analysis skills in meter, mode, harmonic function and song forms through solfeggio, singing and dictation.

MUAC 1021 Aural Skills I (2 Credits)
Development of aural analysis skills in meter, mode, harmonic function and song forms through solfeggio, singing and dictation.

MUAC 1022 Aural Skills I (2 Credits)
Development of aural analysis in meter, mode, harmonic function and song forms through solfeggio, singing and dictation.

MUAC 1030 Convocation Attendance (0 Credits)
All undergraduate-level music majors at Lamont School of Music are required to attend three all-School convocations each quarter they are enrolled. Convocations are schedule for Fridays at 2:30. Each quarter’s schedule can be found on the Lamont tab of PioneerWeb. Convocations include essential information about Lamont and DU, performances by Lamont students who have won School-wide competitions, performances by professional groups and soloists, career discussions and other professional development opportunities, and an annual end-of-the-year student award ceremony.

MUAC 1120 Seminar in Music Theory (1-5 Credits)
MUAC 1134 Music in Film (3 Credits)
MUAC 1161 Piano Class I (4 Credits)
Progressive classes designed to meet the piano proficiency requirements for students majoring in music.

MUAC 1162 Piano Class II (4 Credits)
Progressive classes designed to meet the piano proficiency requirements for students majoring in music.

MUAC 1163 Piano Class III (4 Credits)
Progressive classes designed to meet the piano proficiency requirements for students majoring in music.

MUAC 1189 Jazz Performance Techniques (2 Credits)
Individual study of Jazz performance techniques in a directed study environment.

MUAC 1190 Jazz at the Keyboard (4 Credits)
MUAC 1211 Music Technology (4 Credits)
MUAC 1700 Lyric Diction-English/Italian (2 Credits)
Diction and international phonetic rules; singing technique for English/Italian stressing International Phonetic Alphabet, pronunciation, accent, word order, translation and poetic meter. English will last four weeks and Italian six weeks.

MUAC 1701 Lyric Diction:German/French (2 Credits)
Diction and international phonetic rules; singing technique for German/French stressing International Phonetic Alphabet, pronunciation, accent, word order, translation and poetic meter. German will last five weeks and French five weeks.

MUAC 1920 Basic Conducting (2 Credits)
Introduction to techniques of conducting; a basis and prerequisite for specialized courses in choral, orchestral, and wind conducting. Prerequisites: MUAC 1001, MUAC 1002, MUAC 1003, MUAC 1020, MUAC 1021, and MUAC 1022.

MUAC 1950 Workshop in Advanced Ear Training (1-5 Credits)
MUAC 1992 Directed Study (1-10 Credits)
MUAC 2004 Music Theory II (2 Credits)
MUAC 2005 Music Theory II (2 Credits)
MUAC 2006 Music Theory II (2 Credits)
MUAC 2020 Aural Skills II (2 Credits)
Dictation and sight singing of melodic, harmonic and contrapuntal examples from common practice period.

MUAC 2021 Aural Skills II (2 Credits)
Dictation and sight singing of melodic, harmonic and contrapuntal examples from common practice period.
MUAC 2022 Aural Skills II (2 Credits)
Dictation and sight singing of melodic, harmonic and contrapuntal examples from common practice period.

MUAC 2051 Musicology: Foundations of Musicology (3 Credits)
This course introduces students to "doing musicology." The theme is "beyond the boundaries": music is rarely neat and tidy; it defies the stereotypes, and it spills over its borders. To highlight this perspective, we focus on pieces that bring to the surface contemporary American society's code words for going beyond the boundaries: sex, drugs, and rock 'n' roll. Students develop two skills: articulating what they are hearing and connecting different approaches to understanding music (including musical style, musical structure, history, context, reception, historiography, performance practice, and music in and as culture). The course provides a rigorous background for all the following quarters of musicology coursework, which may include Western art music from the medieval period through the present, jazz and commercial music, and music from other cultures around the world. Prerequisite for music majors: MUAC 1002 or MUAC 1014.

MUAC 2052 Musicology: Medieval And Renaissance Music (3 Credits)
Through the study of selected vocal and instrumental works, this course explores the musical style, performance practice issues and the historical context of Western European music from c. 800 to c. 1600. Scores, recordings, primary sources and secondary sources accompany the textbook. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2053 Musicology: Baroque Music (3 Credits)
Through the study of selected vocal and instrumental works, this course explores the musical style, performance practice issues and the historical context of Western European music from c. 1600 to c. 1750. Scores, recordings, primary sources and secondary sources accompany the textbook. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2054 Musicology: Classical Music (3 Credits)
Through the study of selected vocal, instrumental and operatic works, this course explores the musical style, performance practice issues and the historical context of Western European music from c. 1750 to c. 1820. Scores, recordings, primary sources and secondary sources accompany the textbook. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2055 Musicology: Romantic Music (3 Credits)
Through the study of selected vocal and instrumental works, this course explores the musical style, performance practice issues and the historical context of Western European music from c. 1830 to c. 1890. Scores, recordings, primary sources and secondary sources accompany the textbook. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2056 Musicology: Modern Music (3 Credits)
Through the study of selected vocal and instrumental works, this course explores the musical style, performance practice issues and the historical context of Western European music from c. 1890 to the present. Scores, recordings, primary sources and secondary sources accompany the textbook. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2057 Musicology: Introduction to World Musics (3 Credits)
This course is designed as an introduction to select world music traditions and to ethnomusicology, a discipline many define as the study of music in culture. We focus on three world areas: North India, Brazil, and Senegal. For each of these units, we examine various genres and musical systems and explore music's connection to ritual, belief, aesthetic ideals, politics, and social organization, asking what makes music meaningful for practitioners and audiences. Lectures and discussions are supplemented by regular guest lecture-demonstrations, films and hands-on workshops. Because students interpret the musical works as they represent the ideas and artifacts of human culture and analyze the connections between these and varied human experiences and perceptions of the world, this course may be used to partially fulfill the general education requirement Analytical Inquiry: Society and Culture. Prerequisite for music majors: MUAC 2051.

MUAC 2058 Jazz and Commercial Music History and Repertoire I (1900-1955) (3 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUAC 2059 Jazz and Commercial Music History and Repertoire II (1955-Present) (3 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUAC 2067 Audio Practicum (1-4 Credits)
Clinical training in audio recording and sound reinforcement for bachelor of music audio production concentration majors.

MUAC 2189 Jazz Performance Techniques (2 Credits)
Individual study of jazz performance techniques in a directed study environment.
MUAC 2190 Jazz at the Keyboard (2 Credits)
MUAC 2412 Vocal Literature Survey (2 Credits)
A survey of song literature, concentrating on the major 18th, 19th and 20th century composers.

MUAC 2820 Introduction to Piano Pedagogy I (2 Credits)
Philosophy and psychology of teaching, basic skills in recognition of students' strengths and weaknesses, assessing musical and technical abilities, problem solving; in-class opportunities to teach followed by critical analysis; related readings, projects. Required for piano pedagogy majors.

MUAC 2821 Introduction to Piano Pedagogy II (2 Credits)
Philosophy and psychology of teaching, basic skills in recognition of students' strengths and weaknesses, assessing musical and technical abilities, problem solving; in-class opportunities to teach followed by critical analysis; related readings, projects. Required for piano pedagogy majors.

MUAC 2929 Tutorials-Theoretical Topics (1-5 Credits)
MUAC 2940 Choral Conducting (2 Credits)
Beginning course in choral conducting. Fall quarter only.

MUAC 2950 Orchestral Conducting (2 Credits)
Discussions of and exercises in score study, interpretation, and techniques associated with orchestral conducting. Includes practical experience conducting orchestral repertoire. Prerequisite: MUAC 1920 Basic Conducting. Spring quarter only.

MUAC 2970 Wind Conducting (2 Credits)
Beginning course in wind conducting. Winter quarter only.

MUAC 2992 Directed Study (1-10 Credits)

MUAC 3002 Form and Analysis (4 Credits)
Analysis of structural elements and stylistic features in solo, chamber and orchestral literature from 1600 to present. Prerequisite: MUAC 2006.

MUAC 3005 Post-Tonal Theory and Analysis: Set-Theory and Serialism (4 Credits)
This course has two components: (1) A study of selected analytical techniques for post-tonal music, primarily pitch-class set theory and twelve-tone (serial) theory; (2) Analysis of representative works from the twentieth century, focusing on the music from the first half of the century (Schoenberg, Berg, Webern, Stravinsky, and Bartok). Six credits of Theory 2 or permission of instructor required.

MUAC 3006 Post-Tonal Theory: Mode/Rhythm (4 Credits)
Works of Stravinsky, Bartok, Satie, Debussy, and others are studied, employing various transformational theories, diatonic set theory, and 20th-century metric theories. Prerequisite: completion of Music Theory I and Music Theory II sequences.

MUAC 3010 Tonal Counterpoint (4 Credits)
Eighteenth-century counterpoint using J.S. Bach as a model, with two- and three-part fugue writing.

MUAC 3023 Rhythm & Meter in Tonal Music (4 Credits)
This course gives a general background, including the history of rhythm and meter, different rhythmic analyses, and various topics (dissonance, ambiguity, Schenker, motives, biology, and perception).

MUAC 3024 Introduction to Tonal Analysis (4 Credits)
This course introduces students to various types of musical analysis for tonal music that are more advanced than what is introduced in first- and second-year music theory. Prerequisites: MUAC 2006 and MUAC 2022.

MUAC 3025 Topics in Analysis: Brahms (4 Credits)
This course explores a variety of analytical techniques used to understand the compositions of Brahms. We examine works by musicologists and theorists such as Allen Forte, Walter, Frisch, Arnold Schoenberg, Carl Schachter, and David Lewin. Issues discussed include developing variations, rhythm, form, and ambiguity in Brahms. We cover a wide range of repertoire, ranging from piano works to choral works to symphonies.

MUAC 3030 Seminar-Performance Psychology (2 Credits)

MUAC 3036 Internship (1-5 Credits)

MUAC 3045 Introduction to Studio Recording (3 Credits)
A hands-on introduction to recording popular music in the state of the art Lamont Recording Studio. Students will participate in pre-production and recording of a professional four piece rock band. Students will also learn basic audio theory as it applies to the use of microphones, signal processing, and other studio equipment. Topics to be covered include drum sounds, guitar and bass sounds, basic audio theory and acoustics, basic electricity, digital recording, microphones and DI's, signal routing in the studio, tracking with ProTools HD and Logic Pro7, equalization, dynamics, reverbervation and delay, special effects, mixing to stereo.

MUAC 3058 Audio Production III (4 Credits)
This course covers theory in audio engineering and provides hands-on training in professional audio engineering for studio sessions and live events. Students receive classroom instruction as well as on-site training at Lamont School of Music performances. This is the second sequence in the audio production concentration.
MUAC 3059 Audio Production II (4 Credits)
This course covers theory in audio engineering and provides hands-on training in professional audio engineering for studio sessions and live events. Students receive classroom instruction as well as on-site training at Lamont School of Music performances. This is the first sequence in the audio production concentration.

MUAC 3060 Extra-Musical Roles of the Music Director (1 Credit)
Under the supervision and guidance of the director of orchestral studies, students will gain hands-on, actual experience with many of the non-musical tasks that conductors face. These experiences will include managing orchestra personnel, librarian activities, running auditions, and recruiting. Open only to Artist Diploma in orchestral conducting students.

MUAC 3061 Audio Production I (4 Credits)
An introduction to analog and digital synthesis, MIDI sequencing, and DAW software.

MUAC 3064 Audio Production IV (4 Credits)
This course covers theory in audio engineering and provides hands-on training in professional audio engineering for studio sessions and live events. Students receive classroom instruction as well as on-site training at Lamont School of Music performances. This is the second sequence in the audio production concentration.

MUAC 3065 Audio Production V (4 Credits)
This course covers theory in audio engineering and provides hands-on training in professional audio engineering for studio sessions and live events. Students receive classroom instruction as well as on-site training at Lamont School of Music performances. This is the third sequence in the audio production concentration.

MUAC 3066 Audio Production VI (4 Credits)
This course is an advanced seminar wherein students propose and execute complex, professional level audio production projects toward the goal of establishing a professional audio production portfolio. Students may also incorporate pre-production work in preparation for the audio production concentration senior project. Students serve as engineers and producers at Lamont School of Music recording sessions and live performances.

MUAC 3068 Audio Production for Working Musicians (4 Credits)
In this course, students are taught a solid foundation of basic audio production skills that will enable them to record any style of music. Students are also taught the basics of digital music synthesis and how to create music with digital synthesizers and MIDI. The primary digital audio workstation software used in this course will be ProTools, and each student is required to purchase ProTools (about $250 academic price) and an iLok license dongle (about $40). However, the course has been designed so that skills acquired can be easily applied to any regular DAW platform, such as Logic, Cubase, Ardour, etc. Production techniques for various musical genres will be presented, including Rock, Jazz, Classical, Techno, experimental electro-acoustic, etc. This course will be of great value to performing musicians, singer/songwriters, ensemble directors and conductors, composers, or anyone who wants to record and/or produce music. Students are encouraged but not required to purchase an audio interface and microphone or other input device depending on their area of interest, and are advised in class as to what purchases make sense.

MUAC 3069 Jazz Rhythm Section (4 Credits)
Jazz Rhythm Section provides students with detailed performance practice skills and knowledge. This class may be used to fulfill four hours of Jazz Studies and Commercial Music Area Requirements and may only be taken once for credit. Jazz Studies and Commercial Music Major or the performance ability sufficient to perform on a rhythm section instrument in one of the JSCM ensembles.

MUAC 3070 Produce Your Own Music CD (2 Credits)
To obtain the skills and knowledge necessary for creating your own professional music CD or demo. You will learn the step-by-step process of selecting songs, recording, mastering, manufacturing, and financing your own CD. Furthermore, you will also learn basics about visual presentation using computer graphics (i.e., CD cover, liner notes with lyrics, copyright, bar codes, etc.) and how to market your CD on the internet and in your local area.

MUAC 3091 How to Write Your Own Songs (2 Credits)
To obtain skills and knowledge necessary for writing your own songs. You will learn the step-by-step process of songwriting which includes how to write lyrics, compose melodies and chord progressions, and most importantly, how to combine those two elements to create a "hook." Furthermore, you will also learn common song forms, how to write lead sheets and how to make your song a complete arrangement using vocals, horns, and rhythm section.

MUAC 3092 The Business Side of Music (4 Credits)
A personal and clinical approach to developing music business skills and strategies.

MUAC 3105 Studies in Style: Movement, Mannerisms, Gesture and Physical Comedy (3 Credits)
The exploration of period styles in theatrical and historical genres will be introduced to broaden the singer/actor's repertoire of physical gesture and comedic forms of stage movement. The focus of the course will include studies in rhythm, timing, pacing, musicality and lyricism as these elements apply to heightened expressivity within scene work, character development and ensemble performance. Considerable time will be devoted to the physical practice of related skills as preparation and facilitation of performance projects that will serve as an opportunity for peer observation, group discussion and commentary, and student assessment.
MUAC 3106 The Dynamic Body: Foundations in Movement Methods and Body Awareness Principles (2 Credits)
An introduction to fundamental body awareness principles in relationship to physical performance skills for vocal performance majors. Methods for heightening kinesthetic awareness will be learned in the form of movement explorations, improvisations, structures, and learned phrases to gain somatic insight into the performer's sense of verticality in all places and dimensions of space. The concepts of the body in motion will be a primary context and focus for the progression of studies or 'etudes,' and for the reflective and analytical processes that include observation, journaling, discussion and peer commentary. Studio activities in solo, partnering, and group work will further the student's knowledge of how to become more responsive, expressive, and communicative when interacting with the surrounding environment and with others. Integrated with the body-mind practice and theoretical study, students will be encouraged to inquire, examine and articulate possible philosophies regarding why the mastery of the performer's physical body requires an essential sense of discipline that is cultivated in the performing arts, and how the somatic practices being investigated can serve his/her performance presence and support one's vocal training and health for the long-term.

MUAC 3120 Seminar in Music Theory (1-5 Credits)
Practical application of harmonic (written and aural) materials of 18th, 19th, early 20th centuries. Creative projects and harmonic analysis required.

MUAC 3124 Composition Seminar (1 Credit)
Composition Seminar focuses on the reading and performance of modern scores by Lamont and recognized composers. Any student composing music or wishing to perform new compositions at Lamont may register and participate. Requirements for composers include the completion, rehearsal and performance of a piece of music at the New Music Ensemble concert each quarter. Non-composers are required to rehearse and perform at the New Music Ensemble concert. Composers enrolled in the ensemble may be required to play compositions submitted as well.

MUAC 3161 Topics in Modern Opera (4 Credits)
This course involves the close study of selected twentieth- and twenty-first-century operas, their respective musical styles and their videotaped performances. This study will include such issues as opera and film, opera libretto criticism, and the personal and public politics of the opera.

MUAC 3165 Music Theater Survey (2 Credits)
A historical overview of the American Broadway musical, performance technique, audition preparation and repertoire. Must be prepared to sing and perform.

MUAC 3166 Music Theater Survey II (2 Credits)
Fundamentals of music theater performance will be addressed through readings of the text, "Acting in Music Theater" by Joe Dee and Rocco Dal Vera. Application of these techniques through performance of musical theater literature will be incorporated during the last number of weeks. Additionally, we will highlight prominent composers and their works throughout the quarter.

MUAC 3196 Advanced Composition Tutorial (4 Credits)

MUAC 3200 Recitative in Opera & Oratorio (2 Credits)
The fluid singing of recitative in German, English, Italian and French will be explored and practiced in this class. Students will harmonically analyze examples, add ornamentation, and perform recitative with a knowledge of the translation and emotional content.

MUAC 3234 Cycle of Seasons-Resources (1 Credit)

MUAC 3235 Preschool Music Workshop (3 Credits)

MUAC 3236 Family Music Workshop (1 Credit)

MUAC 3237 Music Makers at the Keyboard (3 Credits)
This 30-hour workshop presents the keyboard method for groups of young beginners ages 5-9.

MUAC 3238 Music Makers at Home & World (3 Credits)
This 30-hour workshop presents the method for a sequential two-year program that guides the musical development of children ages 4-7. Different world cultures are celebrated through music, songs, dances, stories, and rituals.

MUAC 3240 Vocal Pedagogy (2 Credits)
Psychological and physical aspects of teaching of singing.

MUAC 3241 Voice Pedagogy (2 Credits)
Psychological and physical aspects of teaching of singing.

MUAC 3282 Suzuki Violin Seminar II (2 Credits)

MUAC 3283 Suzuki Violin Seminar II (2 Credits)

MUAC 3284 Suzuki Violin Seminar II (2 Credits)

MUAC 3333 Advanced Vocal Pedagogy (2 Credits)
An advanced study of the science behind the singing voice, including the biomechanics of phonation, identifying systems and changes in the voice, posture and breathing that impact phonation, and a physiologic approach to vocal exercises in preparation for teaching voice. Prerequisite: MUAC 3242.
MUAC 3350 Social History-Modern Britain (4 Credits)
This course investigates the intersections of class, gender, and race in nineteenth-century British society. During this period, Britain became the preeminent world power thanks to its spectacular industrialization and its even more impressive empire. Such success often fostered smugness and complacency, yet British society was also riddled with dissension as people struggled to cope with the enormous changes they were witnessing. Discussions focus on the ways in which Victorian people themselves understood their society and its problems, and how they attempted to construct solutions to those problems. Who was implicitly or explicitly excluded from British society? As we consider these topics, we use a variety of secondary and primary sources, including fiction; one goal of the course is for us to think about how to integrate different kinds of sources as we analyze historical problems and create our own interpretations. Cross listed with HIST 3350.

MUAC 3439 Teaching Note Reading (2 Credits)
MUAC 3460 Suzuki Cello Practicum (1 Credit)
MUAC 3461 Suzuki Cello Practicum (1 Credit)
MUAC 3462 Suzuki Cello Practicum (1 Credit)
MUAC 3463 Suzuki Cello Seminar I (2 Credits)
MUAC 3464 Suzuki Cello Seminar I (2 Credits)
MUAC 3465 Suzuki Cello Seminar I (2 Credits)
MUAC 3466 Suzuki Cello Seminar II (2 Credits)
MUAC 3467 Suzuki Cello Seminar II (2 Credits)
MUAC 3468 Suzuki Cello Seminar II (2 Credits)
MUAC 3470 Suzuki Violin Seminar I (2 Credits)
Comprehensive study of Suzuki philosophy, repertoire and teaching techniques for violin. Offered fall, winter, and spring quarters. May be repeated for credit.

MUAC 3471 Suzuki Violin Seminar I (2 Credits)
Comprehensive study of Suzuki philosophy, repertoire and teaching techniques for violin. Offered fall, winter, and spring quarters. May be repeated for credit.

MUAC 3472 Suzuki Violin Seminar I (2 Credits)
Comprehensive study of Suzuki philosophy, repertoire and teaching techniques for violin. Offered fall, winter, and spring quarters. May be repeated for credit.

MUAC 3477 Suzuki Violin Practicum (1 Credit)
MUAC 3478 Suzuki Violin Practicum (1 Credit)
MUAC 3479 Suzuki Violin Practicum (1 Credit)

MUAC 3492 History of Opera: From Monteverdi to Minimalism and Beyond (4 Credits)
This seminar course surveys the history of opera from the invention of the genre c. 1600 to the present day. In addition to assigned excerpts, students view three complete operas during the quarter. Primary and secondary source readings supplement the required text and class lectures. Students write a research paper that may examine some aspect of a particular opera or that may compare a particular aspect found in several operas. With the prior consent of the instructor, students may submit an alternative final project, one that combines performance with some form of written work.

MUAC 3493 Approaches to American Popular Music (4 Credits)
We explore a number of topics involved in the study of popular music, including tensions between analytical and cultural approaches; issues of race, class, and gender; and constructions of authenticity and personae. Listening and reading are wide-ranging, encompassing diverse styles. The course concludes with individual research projects and presentations on topics students choose and develop.

MUAC 3494 Music and Belief in World Cultures (4 Credits)
How does music affect religious experience and how does religion shape musical practice? Why is music vital in some religious rituals and expressly banned in others? If humans use music to create, reflect, and comment upon the worlds they experience and imagine, then the use of music in religious practice is among its most powerful and ephemeral. Students are introduced to a wide range of musical traditions and their relationship to many of the world's religions, including Islam, Judaism, Christianity, Buddhism, Hinduism, Native American belief and the religious practices of Africa and its diaspora. Readings, lectures and discussions are supplemented by guest lecture demonstrations, film/video screenings and hands-on workshops. Prerequisite: Junior or senior standing required; sophomores allowed with instructor approval.

MUAC 3497 Studying Music in the Field: Theory and Method in Ethnomusicology (4 Credits)
This course introduces issues that motivate ethnomusicological research and techniques for carrying out fieldwork, the ethnographic method which has largely come to define the discipline. Our primary texts include Bruno Nettl's classic text, The Study of Ethnomusicology, and Shadows in the Field, a seminal volume of essays discussing ethnomusicological fieldwork. This course also involves hands-on experience in some of the major fieldwork techniques, including field observation and writing fieldnotes, musical transcription and interviewing. This course culminates in a field research project in a Denver musical community determined in consultation with the professor. Note: this course is not open to freshman; sophomores with permission of instructor.
MUAC 3498 Music, Dance, and Everyday Life in South Asia (4 Credits)
This course serves as an introduction to a diverse array of performance traditions from the South Asian subcontinent. We examine the significance of music and dance in everyday life, the influence of media technology, and the relationship of performance to issues such as caste, gender, nationalism and globalization. Class discussions are supplemented by guest lectures, hands-on workshops and film screenings. Our study of music outweighs that of dance, and a music background is strongly encouraged. This course is not open to first-year students. Sophomores allowed with instructor approval.

MUAC 3499 Topics in Musicology (4 Credits)
This course focuses on particular musicology topics determined by the instructor. Course materials may include primary and secondary source readings, theoretical writings from other disciplines, a variety of listening assignments, film/video screenings, guest lecture demonstrations, and hands-on workshops. Students are expected to participate in class discussions and may be asked to write short response papers and/or to give short oral presentations. The course concludes with individual research projects, presented orally and in written form, on topics chosen and developed in consultation with the instructor. Expectations for graduate students enrolled in the course are commensurate with their training and background as compared to undergraduates enrolled in the course. In some cases, with the prior consent of the instructor, students may choose to combine performance with the final research project. Prerequisite: Junior standing.

MUAC 3502 Gender & Genre in World Music (4 Credits)
How are concepts of "maleness," "femaleness" and other gendered categories constructed, maintained, and contested through musical performance? This course examines the issues explored and debated in recent studies of gender relation to music of various cultures including Western art music, popular music, and other world genres. We focus on reading and discussion of ethno-musicological and anthropological ethnographies, musicological studies focusing on gender and theoretical writings from gender and women's studies. Lectures and discussions are supplemented by guest lecture-demonstrations, film/video screenings and hands-on workshops. This course is not open to freshman. Sophomores can register with instructor approval.

MUAC 3511 Mahler and Musical Culture (4 Credits)
We explore Gustav Mahler's life, historical context, and music, all in relation to one another. The focus is on recent and important scholarly approaches to this conductor and composer. The course concludes with individual research projects and presentations on topics students choose and develop.

MUAC 3513 Wagner and the Ideology of the Artwork (4 Credits)
We explore Richard Wagner's music dramas, particularly the Ring operas, as well as theories and ideologies surrounding them. The focus is on recent and important scholarly approaches. The course concludes with individual research projects and presentations on topics students choose and develop.

MUAC 3520 Topics in Baroque Music (4 Credits)
Through the study of selected Baroque instrumental, vocal and operatic works, this seminar course considers various approaches to performance practice issues such as "authenticity," the "historically informed" performance, period instruments, ornamentation, continuo realization, and editing. Facsimile editions and primary and secondary source readings serve as the texts for the course. Students write a research paper that examines some aspect of Baroque music with an emphasis on performance practice. With the prior consent of the instructor, students may submit an alternative final project, one that combines performance with some form of written work.

MUAC 3535 Musics of the African Diaspora (4 Credits)
How have African music-cultures changed in their transitions to new lands? What performative Africanisms have been retained, reconstructed and/or highlighted in the aftermath of legal slavery? And within newer Afro-diasporic communities? What role does musical transmission play in cultural retention and survival? This course will explore the connections and differences in musical practice and worldview throughout the African diaspora. We focus primarily on music-cultures of North, South, and Central America, and the Caribbean, examining traditional forms of music and dance associated with religion and ritual such as Afro-Cuban bata drumming, practices which fuse music and movement such as Afro-Brazilian capoeira, jazz, and popular music such as rap. Lectures and class discussions are supplemented by guest lecture-demonstrations, film/video screenings and hands-on workshops. This course is not open to freshman. Sophomores with permission of instructor.

MUAC 3541 Mozart's Piano Concertos (4 Credits)
Cultural context, stylistic sources, stylistic development, meaning, and performance issues with regard to Mozart's 30 works in the piano concerto genre. Principles for the creation of stylistic cadenzas, lean-ins, embellishments, "white-spot" fill-ins, and basso continuo realizations. Considerations of means for integration aspects of the concertos' original cultural context into performance for twenty-first-century pianists, orchestral players, and their listeners. Course is designated for both pianists and non-pianists and can be taken by graduate students and upper-division undergraduate students.

MUAC 3542 Beethoven's Piano Concertos (4 Credits)
Cultural context, stylistic sources, stylistic development, meaning, and performance issues with regard to Beethoven's works in the piano concerto genre, including the triple concerto and the choral fantasia with piano. Consideration of means of integrating aspects of the concertos' original cultural context into performance for twenty-first-century pianists, orchestral players, and their listeners. Course is designated for both pianists and non-pianists and can be taken by graduate students and upper-division undergraduate students.

MUAC 3543 Schubert and the Piano: Sonatas and Chamber Music (4 Credits)
Cultural context, stylistic sources, stylistic development, meaning, and performance issues with regard to Franz Peter Schubert's works in the piano sonata genre - whether for two or four hands - and other closely related genres. Consideration of means for integrating aspects of the works' original cultural context into performance for 21st-Century pianists and their listeners. Course is designated for both pianists and non-pianists and can be taken by graduate students and upper-division undergraduate students.
MUAC 3545 The Making of Romantic Music: Paris and Leipzig in the 1830s (4 Credits)
With a view to identifying the various interdisciplinary factors that led to the making of romantic music, this seminar course focuses on musical life in Paris and Leipzig in the 1830s. Specific attention is paid to the music of Chopin, Berlioz, Mendelssohn, and Robert and Clara Schumann and the personal and musical connections between these composers. Primary and secondary source readings serve as the texts for the course. Students write a research paper that examines some aspect of music and/or musical life in the 1830s. With the prior consent of the instructor, students may submit an alternative final project, one that combines performance with some form of written work.

MUAC 3550 Major Composers-J.S. Bach (4 Credits)
Music of Bach, including chronological development, form and style, studied against background of baroque musical practice and circumstances of Bach’s life and temperament. Prerequisites: MUAC 1621, 1622 and 1623.

MUAC 3570 Major Composers: Beethoven (4 Credits)

MUAC 3578 Advanced Composition (4 Credits)
Advanced composition with students composing works of large scope and using a variety of advanced techniques consistent with interests and abilities; emphasis on imagination and originality of personal expression.

MUAC 3579 Advanced Composition (3 Credits)
Advanced composition with students composing works of large scope and using a variety of advanced techniques consistent with interests and abilities; emphasis on imagination and originality of personal expression. May be taken more than once for credit. Prerequisite: MUAC 3020.

MUAC 3590 Guitar History (4 Credits)

MUAC 3600 The Evolution of Rock (4 Credits)
This course traces the history of rock from the Beatles in the early 60’s to the most recent developments of the 90’s. The course provides a concise overview of this most influential musical phenomenon. Designed for the non-music major, it requires no prerequisites. Classes consist of lectures and listening. All listening examples are available via computer to each student.

MUAC 3650 Orchestral Excerpts-Cello (4 Credits)
This course will explore excerpts from the standard orchestral literature, highlighting favorite audition materials of the major symphony orchestras. Students will be given a list of excerpts and coached on how to prepare them. They will participate in mock auditions and receive feedback. This course will also address the mental aspects involved in taking successful auditions and the expectations demanded of them in the professional world of orchestras.

MUAC 3655 Orchestral Excerpts-Bass (4 Credits)
This course will explore excerpts from the standard orchestral literature, highlighting favorite audition materials of the major symphony orchestras. Students will be given a list of excerpts and coached on how to prepare them. They will participate in mock audition and receive feedback. This course will also address the mental aspects involved in taking successful auditions and the expectations demanded of them in the professional world of orchestras.

MUAC 3660 Orchestral Excerpts-Violin (4 Credits)
This course will explore excerpts from the standard orchestral literature, highlighting favorite audition materials of the major symphony orchestras. Students will be given a list of excerpts and coached on how to prepare them. They will participate in mock auditions and receive feedback. This course will also address the mental aspects involved in taking successful auditions and the expectations demanded of them in the professional world of orchestras.

MUAC 3661 Orchestral Excerpts Viola (4 Credits)
This course explores excerpts from the standard orchestral literature, highlighting favorite audition materials of the major symphony orchestras. Students are given a list of excerpts and coached on how to prepare them. They participate in mock auditions and receive feedback. This course also addresses the mental aspects involved in taking successful auditions and the expectations demanded of them in the professional world of orchestras.

MUAC 3662 Orchestral Studies for Brass (2 Credits)
Study of orchestral literature brass players are likely to be asked to play at auditions for professional orchestras. Undergraduate participants should have passed their Sophomore Proficiency jury with distinction.

MUAC 3663 Orchestral Excerpts, Viola II (4 Credits)
Companion course to Orchestral Excerpts Viola I, this section expands the repertoire list beyond the standard works used for auditions today. In addition to further honing basic requisite material from section I, students study and prepare less frequently required works and principle viola solo repertoire. There is more extensive discussion of the audition process and mock auditions as a part of the course. While it is advised and preferable that students complete the first section of this course it is possible to take the course with the approval of the instructor.

MUAC 3682 Topics-Orchestral Repertoire (4 Credits)
We explore the history of the orchestra and orchestral literature from the baroque through modern eras, and examine a number of test cases in which conventional understanding has been challenged in recent years. The course concludes with individual research projects and presentations on topics students choose and develop.

MUAC 3683 History of Chamber Music (4 Credits)
Chamber music from baroque trio sonata to contemporary electronic works. Prerequisites: MUAC 1621, MUAC 1622 and MUAC 1623. Winter quarter only.
MUAC 3684 Choral Literature I (2 Credits)
This course is an analysis of the development of choral repertoire from the Middle Ages through the Baroque era.

MUAC 3686 Choral Pedagogy I (2 Credits)
The Choral Pedagogy course focuses on effective choral methods and techniques indigenous to primary schools of thought that have risen to prominence or have proven successful in practice and performance throughout the last 50 years in the academic and professional choral idiom. Through study and analysis of selected works by various composers, effective teaching techniques are explored in performance practice and style interpretation.

MUAC 3688 Choral Pedagogy II (2 Credits)
The Choral Pedagogy course focuses on effective choral methods and techniques indigenous to primary schools of thought that have risen to prominence or have proven successful in practice and performance throughout the last 50 years in the academic and professional choral idiom. Through study and analysis of selected works by various composers, effective teaching techniques are explored in performance practice and style interpretation.

MUAC 3689 Choral Literature II (2 Credits)
This course is an analysis of the development of choral repertoire from the Classical period until the present day. This course is meant to be taken in sequence after Choral Literature I.

MUAC 3698 Carillon History and Mechanics (4 Credits)
A survey of the evolution of signal bells into the musical instrument known as the carillon. This subject is often called “campanology.” The history will be traced from the 16th century in the Low Countries through modern times in Europe, North America, Australia/New Zealand and Japan. Topics will include bell foundries, bell casting and tuning, bell chambers, playing actions, carillonneurs, carillon schools, carillon organizations, the use of the carillon in its various regions and basic carillon maintenance.

MUAC 3700 Carillon Repertoire (4 Credits)
A survey of the music expressly produced for carillon from the earliest times through the present. Categories include automatic music (e.g., De Sany, Wyckaert, Eggert), the earliest compositions for manual play (Van den Gheyn and the Louvain manuscripts of the 18th century), and the 20th-century categories: Flemish, Dutch, French and North American. Mainstream publishers as well as incidental publications will be covered. The labs will focus on analysis through recordings and live performances by participants.

MUAC 3704 Pedagogy & Repertoire Tuba (4 Credits)
Teaching techniques and survey of literature and teaching materials for the tuba.

MUAC 3705 Pedagogy & Repertoire Tuba (4 Credits)
Teaching techniques and survey of literature and teaching materials for the tuba.

MUAC 3706 Pedagogy & Repertoire Tuba (4 Credits)
Teaching techniques and survey of literature and teaching materials for the tuba.

MUAC 3707 Pedagogy & Repertoire Horn (4 Credits)
Teaching techniques and survey of literature and teaching materials for the horn.

MUAC 3708 Pedagogy & Repertoire Horn (4 Credits)
Teaching techniques and survey of literature and teaching materials for the horn.

MUAC 3709 Pedagogy & Repertoire Horn (4 Credits)
Teaching techniques and survey of literature and teaching materials for the horn.

MUAC 3710 Carillon Pedagogy I (2 Credits)
An exploration of the physical and psychological elements that can lead to effective carillon teaching: technique, handling/pedaling (“fingering” on the piano), and developing an attitude that fosters successful performance.

MUAC 3711 Pedagogy & Repertoire Trombone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trombone.

MUAC 3712 Pedagogy & Repertoire Trombone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trombone.

MUAC 3713 Pedagogy & Repertoire Trombone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trombone.

MUAC 3717 Pedagogy & Repertoire Percussion (4 Credits)
Teaching techniques and survey of literature and teaching materials for percussion.

MUAC 3718 Pedagogy & Repertoire Percussion (4 Credits)
Teaching techniques and survey of literature and teaching materials for percussion.

MUAC 3719 Pedagogy & Repertoire Percussion (4 Credits)
Teaching techniques and survey of literature and teaching materials for percussion.

MUAC 3724 Pedagogy & Repertoire Guitar (4 Credits)
Teaching techniques and survey of literature and teaching materials for the guitar.

MUAC 3726 Pedagogy & Repertoire Viola (4 Credits)
Teaching techniques and survey of literature and teaching materials for the viola.
MUAC 3727 Pedagogy & Repertoire Viola (4 Credits)
Teaching techniques and survey of literature and teaching materials for the viola.

MUAC 3730 Pedagogy & Repertoire Cello (4 Credits)
Teaching techniques and survey of literature and teaching materials for the cello.

MUAC 3733 Pedagogy & Rep Double Bass (4 Credits)
Teaching techniques and survey of literature and teaching materials for the double bass.

MUAC 3735 Pedagogy & Repertoire Harp (4 Credits)
Teaching techniques and survey of literature and teaching materials for the harp.

MUAC 3736 Pedagogy & Repertoire Harp (4 Credits)
Teaching techniques and survey of literature and teaching materials for the harp.

MUAC 3737 Pedagogy & Repertoire Harp (4 Credits)
Teaching techniques and survey of literature and teaching materials for the harp.

MUAC 3738 Pedagogy & Repertoire Organ (2 Credits)
Teaching techniques and survey of literature and teaching materials for the organ.

MUAC 3739 Pedagogy & Repertoire Organ (2 Credits)
Teaching techniques and survey of literature and teaching materials for the organ.

MUAC 3740 Pedagogy & Repertoire Organ (2 Credits)
Teaching techniques and survey of literature and teaching materials for the organ.

MUAC 3741 Pedagogy & Repertoire Trumpet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trumpet.

MUAC 3742 Pedagogy & Repertoire Trumpet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trumpet.

MUAC 3743 Pedagogy & Repertoire Trumpet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the trumpet.

MUAC 3747 Pedagogy & Repertoire Flute (4 Credits)
Teaching techniques and survey of literature and teaching materials for the flute.

MUAC 3748 Pedagogy & Repertoire Flute (4 Credits)
Teaching techniques and survey of literature and teaching materials for the flute.

MUAC 3749 Pedagogy & Repertoire Flute (4 Credits)
Teaching techniques and survey of literature and teaching materials for the flute.

MUAC 3750 Pedagogy & Repertoire Clarinet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the clarinet.

MUAC 3751 Pedagogy & Repertoire Clarinet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the clarinet.

MUAC 3752 Pedagogy & Repertoire Clarinet (4 Credits)
Teaching techniques and survey of literature and teaching materials for the clarinet.

MUAC 3753 Pedagogy & Repertoire Saxophone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the saxophone.

MUAC 3754 Pedagogy & Repertoire Saxophone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the saxophone.

MUAC 3755 Pedagogy & Repertoire Saxophone (4 Credits)
Teaching techniques and survey of literature and teaching materials for the saxophone.

MUAC 3756 Pedagogy & Repertoire Oboe (4 Credits)
Teaching techniques and survey of literature and teaching materials for the oboe.

MUAC 3757 Pedagogy & Repertoire Oboe (4 Credits)
Teaching techniques and survey of literature and teaching materials for the oboe.

MUAC 3758 Pedagogy & Repertoire Oboe (4 Credits)
Teaching techniques and survey of literature and teaching materials for the oboe.

MUAC 3759 Pedagogy & Repertoire Bassoon (4 Credits)
Teaching techniques and survey of literature and teaching materials for the bassoon.

MUAC 3761 Pedagogy & Repertoire Bassoon (4 Credits)
Teaching techniques and survey of literature and teaching materials for the bassoon.
MUAC 3762 Pedagogy & Repertoire Bassoon (4 Credits)
Teaching techniques and survey of literature and teaching materials for the bassoon.

MUAC 3765 Professional Brass Techniques (4 Credits)
This 4-hour per week course will be divided into a lecture/seminar for two hours and performance practicum for two hours. Topics discussed and performed include orchestral playing, sight reading, practice, solo performance, jazz survival, ornamentation, transposition, and warm-up/maintenance routine.

MUAC 3801 Introduction to Schenkerian Analysis (4 Credits)

MUAC 3804 Topics in Music (1-5 Credits)

MUAC 3810 Voice Repertoire (2 Credits)
Styles, periods and traditions of vocal repertoire from earliest music to contemporary compositions.

MUAC 3811 Voice Repertoire (2 Credits)
Styles, periods and traditions of vocal repertoire from earliest music to contemporary compositions.

MUAC 3812 Voice Repertoire (2 Credits)
Styles, periods and traditions of vocal repertoire from earliest music to contemporary compositions.

MUAC 3822 Piano Repertoire I (2 Credits)
Performance and analysis.

MUAC 3823 Piano Repertoire II (3 Credits)
Performance and analysis.

MUAC 3824 Piano Repertoire III (3 Credits)
Performance and analysis.

MUAC 3830 Jazz and Commercial Music Orchestration and Arranging (4 Credits)
This course offers an in-depth, three term sequence of the theory, forms and styles of commercial music composition. Prerequisite: Satisfactory completion of first- and second-year written and aural theory. Final projects include production of a "studio orchestra" piece and writing for a film, including MIDI and SMPTE technologies.

MUAC 3831 Jazz and Commercial Music Orchestration and Arranging (4 Credits)
This course offers an in-depth, three term sequence of the theory, forms and styles of commercial music composition. Prerequisite: Satisfactory completion of first- and second-year written and aural theory. Final projects include production of a "studio orchestra" piece and writing for a film, including MIDI and SMPTE technologies.

MUAC 3832 Jazz and Commercial Music Orchestration and Arranging (4 Credits)
This course offers an in-depth, three term sequence of the theory, forms and styles of commercial music composition. Prerequisite: Satisfactory completion of first- and second-year written and aural theory. Final projects include production of a "studio orchestra" piece and writing for a film, including MIDI and SMPTE technologies.

MUAC 3841 Jazz & Commercial Music History/Repertoire (4 Credits)

MUAC 3842 Jazz & Commercial Music History/Repertoire (4 Credits)
Writing for small and large jazz groups; accompaniment skills; writing for live performance versus writing for recorded performance. Prerequisite: MUAC 3830.

MUAC 3843 Jazz & Commercial Music History/Repertoire (4 Credits)
Writing for small and large jazz groups; accompaniment skills; writing for live performance versus writing for recorded performance. Prerequisite: MUAC 3830.

MUAC 3844 21st Century Artistry I (4 Credits)
21st Century Artistry I is a course of study that examines the full spectrum of attributes and skills necessary for a student to “survive and thrive” in the every-changing landscape of the 21st Century. With a two-fold approach of examining effective strategies for a “modern artistry mindset” along with extensive case studies of successful 21st Century professionals, this course will offer the student a wide array of important recourses to guide their career. The case study aspect of 21st Century Artistry I will be based on multiple evaluations of successful artists in the 21st Century in partnership with local presenters. Prerequisite: MUAC 3092 The Business Side of Music.

MUAC 3847 Hip-Hop: Theory and Practice (4 Credits)
Students in this class will examine the socio-cultural, economic, and political significance of hip-hop as a medium of expression for youth around the world. Through analysis of popular writing and media, as well as academic texts, we critically explore issues of race, social justice, masculinity, misogyny, censorship, technology, and intellectual property, as they relate to mainstream and underground hip-hip in America. Having discussed hip-hop's roots in the U.S., the remainder of the quarter will be devoted to tracing hip-hop's global routes.

MUAC 3860 Basic Jazz Improvisation (4 Credits)
The study of jazz improvisation techniques and forms. Open to music majors or by instructor permission.
MUAC 3870 Jazz Improvisation & Composition (4 Credits)
Improvisational styles of major jazz soloists studied through transcription and analysis of selected recorded jazz solos; scales and modes; rhythmic styles and devices; practice and development of individual student's improvisational technique. Prerequisites: MUAC 1011, MUAC 1012, MUAC 3830.

MUAC 3872 Jazz Improvisation & Composition (4 Credits)
Improvisational styles of major jazz soloists studied through transcription and analysis of selected recorded jazz solos; scales and modes; rhythmic styles and devices; practice and development of individual student's improvisational technique. Prerequisites: MUAC 1011, MUAC 1012, MUAC 3830.

MUAC 3910 Orchestration (4 Credits)
Techniques of instrumental scoring.

MUAC 3933 Graduate Music History Review (0 Credits)

MUAC 3950 Workshop: Advanced Ear Training (4 Credits)
Intensive application of procedures involving dictation and sight singing. Two-, three-, four-voiced examples emphasized. Summer session only.

MUAC 3955 Advanced Aural Skills (4 Credits)
In this course, students will acquire advanced rhythmic, melodic, and harmonic aural skills, through a combination of listening exercises, sight singing, and performing on their own instruments. Material for study will include atonal melody and harmony, complex rhythmic patterns, advanced exercises in traditional tonal patterns, and performance issues. Prerequisites: MUAC 1002, MUAC 1021 or equivalent.

MUAC 3959 Movement and Expression for Conductors (2 Credits)
Conductors use their whole body to communicate and elicit successful performances from their ensemble. If you have unnecessary tension or lack of ease in your body, this is communicated unconsciously to your ensemble, hindering quality of performance. Additionally, physical tension can prevent your ability to communicate and think clearly under pressure. This course is an exploration of freedom of movement and the physicality of musical expression. Classes will include group activities in free-movement, dance, acting, keeping your cool, poise, balance, tension release, as well as hands-on instruction applying Alexander technique to your conducting.

MUAC 3960 Advanced Orchestral Conducting (2 Credits)
Discussions of and exercises in score study, interpretation, and techniques associated with orchestral conducting. Includes practical experience conducting orchestral repertoire. Required of MM Conducting students with Choral or wind concentrations. Open to other students with permission of instructor. Prerequisite: Permission of instructor (not needed for MM Conducting students with Choral or Wind concentration). Fall quarter only.

MUAC 3961 Advanced Choral Conducting (2 Credits)
Conducting complex choral works, including those with instrumental accompaniment; phrasing, interpretation and score reading. Prerequisite: MUAC 2940. Fall quarter only.

MUAC 3962 Advanced Wind Conducting (2 Credits)
Conducting complex wind compositions; phrasing interpretation and score reading. Prerequisite: MUAC 2970. Spring quarter only.

MUAC 3973 Advanced Wind Literature I (2 Credits)
This course is an overview of wind literature appropriate for junior high school, high school, college and professional programs including strategies in effective programming and creation of appropriate program notes.

MUAC 3974 Advanced Wind Literature II (2 Credits)
An in-depth study of successful compositional techniques by prominent composers of wind literature. Prerequisite: MUAC 3973.

MUAC 3980 Advanced Jazz Improvisation and Composition (4 Credits)
A three term sequence continuing the in-depth study of the theory, performance practices, style, and history of jazz improvisation and composition. Prerequisite: satisfactory completion of the three terms of Jazz Improvisation and Composition or consent of the instructor.

MUAC 3990 Internship in Music (1-8 Credits)
Internship in Music will offer opportunities for music majors to experience actual music related careers within a sponsoring music organization chosen by the student and accepted by the supervising faculty of the School of Music.

MUAC 3991 Independent Study (1-10 Credits)

MUAC 3992 Directed Study (1-10 Credits)

Music-Ensembles Courses

MUEN 3025 Ensemble Block (3 Credits)
Required for all incoming first-year music majors.

MUEN 3028 Album Combo (0-1 Credits)
The study and performance of the skills and practices of collective improvisation and composition.

MUEN 3029 Steel Drum Ensemble (0-1 Credits)
The steel drum music of Trinidad and Tobago as well as other styles of music from around the world are studied and performed by this ensemble. Participation in this ensemble does not require music notation. Participation in the ensemble is limited; therefore, students are selected by a simple audition process.
MUEN 3030 Hard Bop Combo (0-1 Credits)
The Hard Bop Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with Hard Bop jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3031 Bebop Combo (0-1 Credits)
The Bebop Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with Bebop jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3032 Latin Combo (0-1 Credits)
The Latin Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with Latin jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3033 Standards Combo (0-1 Credits)
The Standards Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with standard jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3034 Traditional Jazz Combo (0-1 Credits)
The Traditional Jazz Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with traditional (Dixieland) jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3035 Fusion Combo (0-1 Credits)
The Fusion Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with fusion jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3036 Commercial Music Combo (0-1 Credits)
The Commercial Music Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with commercial music repertoire and performance practices. The combo performs one concert each term on campus and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3037 Vocal Repertoire Combo (0-1 Credits)
The Vocal Repertoire Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with vocal jazz solo repertoire and performance practices. The combo performs one concert each term on campus and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3038 Vocal Jazz Combo (0-1 Credits)
The Vocal Jazz Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with vocal jazz repertoire and performance practices. The combo performs one concert each term on campus and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3039 Modal Combo (0-1 Credits)
The Modal Combo is coached by one of our faculty of performing jazz and commercial artists and is concerned with modal jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3040 Contemporary Combo (0-1 Credits)
The Contemporary Combo is coached by one of our faculty of performing jazz and commercial music artists and is concerned with contemporary jazz repertoire and performance practices. The combo performs one concert each term on campus, one performance at Flo's Underground Jam sessions, and frequent concerts in the community and on tour. Admission is by audition.

MUEN 3041 North Indian Classical Ensemble (0-1 Credits)
The arts of India are distinguished by their close interrelationship; rhythm, melody and movement are all encompassed by the term "sangeet." In keeping, DU's North Indian Classical Ensemble is dedicated to the practice of all three of these arts, through singing, rhythmic recitation and dance. Participation in this ensemble involves studying the ornate and highly refined systems of Hindustani music and Kathak dance. No prior experience is necessary; all that is required is a positive attitude and a desire to learn!.

MUEN 3042 Advanced Vocal Jazz Repertoire (0-1 Credits)
This combo is intended for vocal jazz majors who have completed the first year of Vocal Jazz Repertoire and are ready to progress into more advanced repertoire, as well as composing and arranging for small group settings.
MUEN 3043 Senegalese Drum/Dance Ensemble (0-1 Credits)
This ensemble is dedicated to learning the art of sabar dance and drumming, vibrant traditions of the Wolof people of Senegal, West Africa. In Senegal, sabar drums are played exclusively by griots, a caste of hereditary musicians. Sabar drum troupes perform at a variety of events, baptisms, weddings, wrestling matches, political meetings, and neighborhood dance parties. At most of these events, dance is an essential counterpart to drumming. The drum ensemble consists of numerous parts that come together to create complex polyrhythms. Ensemble members learn various drum parts that form rhythms over which a lead drummer solos, and dance movements that accompany these drum rhythms. They also learn bakks, extended musical phrases played in unison, and songs in the Wolof language. This course may be taken multiple times. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3044 Ghanaian Drumming Ensemble (0-1 Credits)
This class provides a practical and theoretical introduction to the drumming and singing traditions of Ghana, West Africa. Through hands-on instruction and oral transmission, students learn ceremonial and recreational music styles of select ethnic groups. Assigned readings, film viewing, guided listening, and in-class discussion familiarizes students with the social and cultural meanings of the musics performed in class. The course culminates in an end of the quarter concert. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3045 Flex Jazz Ensemble (0-1 Credits)
The Flex Jazz Ensemble is a modern jazz group with open-ended instrumentation. The ensemble consists of traditional jazz instruments and vocalists as well as nontraditional jazz instruments (such as double reed, French Horns, strings, etc). While there is no specific instrumentation for the ensemble, the core of the group will always be the traditional modern jazz rhythm section: piano (keys-synth), bass (acoustic and electric), drums (plus an extra percussionist as needed), and guitar (hollow body and Stratocaster-styles with the full range of pedals and gear. With the addition of non-traditional instrumentation, the ensemble reaches out to the classical side of Lamont to give those students a jazz opportunity. Along with the regular fare of programmed concerts, this ensemble also provides opportunities to other departments (theatre, creative writing, studio art, EDP, etc) to incorporate their disciplines in performances.

MUEN 3710 Opera (0-1 Credits)
Practical experience in operatic performance. One production each quarter; major production in winter quarter. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3712 Lamont Chorale (0-1 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3720 Pioneer Pep Band (0-1 Credits)
MUEN 3740 Lamont Men’s Choir (0-1 Credits)

MUEN 3750 Modern Music Ensemble (1 Credit)
The 20th- and 21st- Centuries have produced some of the most expressive, intriguing, and diverse music ever written. In this course, students have the opportunity to prepare and perform chamber music by 20th-Century masters, as well as recent works by living composers and new pieces written for them by students. This repertoire often involved unusual combinations of instruments (potentially including strings, woodwinds, brass, percussion, plucked instruments, keyboards, vocals, and electronics), providing an opportunity for students to work in less familiar ensembles. Students may also participate in the course by conducting or composing. The course is limited to music majors who are graduate students or advanced undergraduate students. Students in their first or second undergraduate year, and music non-majors may enroll with instructor approval.

MUEN 3751 Lamont Jazz Orchestra (0-1 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3752 Lamont Wind Ensemble (0-1 Credits)
Open to all students by audition and approval of conductor; regularly scheduled concerts. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3753 Lamont Jazz Ensemble (0-1 Credits)
Open to all students by audition and approval of director of jazz studies; regularly scheduled concerts. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3754 University Jazz Ensemble (0-1 Credits)
The study of large ensemble jazz works for non-music majors. Must have high school performance ability.

MUEN 3760 Lamont Symphony Orchestra (0-1 Credits)
The LSO generally performs six symphonic concerts and one opera each year. Students are exposed to orchestral repertoire from all periods and styles of music as well as appropriate performance practices associated with each period and style. The LSO is open to all university students by audition. However, because the course objective is to prepare students for successful professional orchestra careers, all participants are held to a very high standard and level of expectation. This course counts toward the Analytical Inquiry: Society and Culture requirement.

MUEN 3769 Organ Accompanying (0-1 Credits)
Major choral/vocal and major instrumental repertoire with organ accompaniment are studied and prepared for possible performance with chamber groups or local professional/church choirs.

MUEN 3770 Chamber Ensemble-Piano (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.
MUEN 3771 Chamber Ensemble-Accordion (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3772 Chamber Ensemble-Harp (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3774 Chamber Ensemble-Brass (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3775 Piano Accompanying (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3776 Chamber Ensemble-Percussion (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3777 Chamber Ensemble-Strings (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3778 Chamber Ensemble-Woodwind (0-1 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3781 Chamber Ensemble-Guitar (0-2 Credits)
Small ensembles studying chamber music repertoire for various groups.

MUEN 3800 Vocal Chamber Ensemble (0-1 Credits)
A small group of outstanding singers interested in singing soloist vocal chamber music.

MUEN 3900 Lamont Women's Chorus (0-1 Credits)
This course counts toward the Analytical Inquiry: Society and Culture requirement.
Music-Studio Lessons Courses
MUPR 1191 Jazz Piano (2 Credits)
MUPR 1192 Jazz Piano (4 Credits)
MUPR 1210 Piano (2 Credits)
MUPR 1220 Piano (4 Credits)
MUPR 1230 Voice (2 Credits)
MUPR 1240 Voice (4 Credits)
MUPR 1250 Violin (2 Credits)
MUPR 1260 Violin (4 Credits)
MUPR 1270 Violoncello (2 Credits)
MUPR 1280 Violoncello (4 Credits)
MUPR 1290 Viola (2 Credits)
MUPR 1300 Viola (4 Credits)
MUPR 1310 Bass Violin (2 Credits)
MUPR 1311 Jazz Bass (2 Credits)
MUPR 1312 Jazz Bass (4 Credits)
MUPR 1320 Bass Violin (4 Credits)
MUPR 1330 Harp (2 Credits)
MUPR 1340 Harp (4 Credits)
MUPR 1350 Organ (2 Credits)
MUPR 1360 Organ (4 Credits)
MUPR 1370 Clarinet (2 Credits)
MUPR 1380 Clarinet (4 Credits)
MUPR 1390 Flute (2 Credits)
MUPR 1400 Flute (4 Credits)
MUPR 1460 Bassoon (2 Credits)
MUPR 1470 Bassoon (4 Credits)
MUPR 1480 Trombone (2 Credits)
MUPR 1481 Jazz Trombone (2 Credits)
MUPR 1490 Trombone (4 Credits)
MUPR 1491 Jazz Trombone (4 Credits)
MUPR 1500 Trumpet (2 Credits)
MUPR 1510 Trumpet (4 Credits)
MUPR 1520 Horn (2 Credits)
MUPR 1530 Horn (4 Credits)
MUPR 1540 Euphonium (2 Credits)
MUPR 1550 Euphonium (4 Credits)
MUPR 1560 Tuba (2 Credits)
MUPR 1570 Tuba (4 Credits)
MUPR 1600 Classical Guitar (2 Credits)
MUPR 1602 Jazz Guitar (2 Credits)
MUPR 1610 Classical Guitar (4 Credits)
MUPR 1620 Jazz Guitar (4 Credits)
MUPR 1660 Percussion (2 Credits)
MUPR 1662 Percussion Set (2 Credits)
MUPR 1663 Percussion Set (4 Credits)
MUPR 1671 Percussion (4 Credits)
MUPR 1680 Oboe (2 Credits)
MUPR 1925 Composition (4 Credits)
One-on-one instruction for composition majors.

MUPR 2191 Jazz Piano (2 Credits)
MUPR 2192 Jazz Piano (4 Credits)
MUPR 2195 Applied Music and Lessons (2,4 Credits)

MUPR 2210 Piano (2 Credits)
BA music emphasis.

MUPR 2220 Piano (4 Credits)
BM performance.

MUPR 2230 Voice (2 Credits)
BA music emphasis.

MUPR 2240 Voice (4 Credits)
BM performance.

MUPR 2250 Violin (2 Credits)
BA music emphasis.

MUPR 2260 Violin (4 Credits)
BM performance.

MUPR 2270 Violin (2 Credits)
BA music emphasis.

MUPR 2280 Violin (4 Credits)
BM performance.

MUPR 2290 Viola (2 Credits)
BA music emphasis.

MUPR 2300 Viola (4 Credits)
BM performance.

MUPR 2310 Bass Violin (2 Credits)
BA music emphasis.

MUPR 2312 Jazz Bass (2 Credits)
BM performance.

MUPR 2314 Jazz Bass (4 Credits)

MUPR 2320 Bass Violin (4 Credits)
BM performance.

MUPR 2330 Bass Harp (2 Credits)
BA music emphasis.

MUPR 2340 Harp (4 Credits)
BM performance.

MUPR 2350 Organ (2 Credits)

MUPR 2360 Organ (4 Credits)

MUPR 2370 Clarinet (2 Credits)
BA music emphasis.

MUPR 2380 Clarinet (4 Credits)
BM performance.

MUPR 2390 Flute (2 Credits)
BA music emphasis.

MUPR 2400 Flute (4 Credits)
BM performance.

MUPR 2460 Bassoon (2 Credits)
BA music emphasis.

MUPR 2470 Bassoon (4 Credits)
BM performance.
MUPR 2480 Trombone (2 Credits)  
BA music emphasis.

MUPR 2481 Jazz Trombone (2 Credits)  

MUPR 2490 Trombone (4 Credits)  
BA music emphasis.

MUPR 2491 Jazz Trombone (4 Credits)  

MUPR 2500 Trumpet (2 Credits)  
BA music emphasis.

MUPR 2510 Trumpet (4 Credits)  
BM performance.

MUPR 2520 Horn (2 Credits)  
BA music emphasis.

MUPR 2530 Horn (4 Credits)  
BM performance.

MUPR 2540 Euphonium (2 Credits)  
BA music emphasis.

MUPR 2550 Euphonium (4 Credits)  
BM performance.

MUPR 2560 Tuba (2 Credits)  
BA music emphasis.

MUPR 2570 Tuba (4 Credits)  
BM performance.

MUPR 2600 Classical Guitar (2 Credits)  
BA music emphasis.

MUPR 2610 Classical Guitar (4 Credits)  
BM performance.

MUPR 2621 Jazz Guitar (2 Credits)  

MUPR 2625 Jazz Guitar (4 Credits)  
BM performance.

MUPR 2660 Percussion (2 Credits)  
BA music emphasis.

MUPR 2661 Percussion Set (2 Credits)  

MUPR 2670 Percussion (4 Credits)  
BM performance.

MUPR 2671 Percussion Set (4 Credits)  

MUPR 2680 Oboe (2 Credits)  
BA music emphasis.

MUPR 2690 Oboe (4 Credits)  
BM performance.

MUPR 2780 Saxophone (2 Credits)  
BA music emphasis.

MUPR 2790 Saxophone (4 Credits)  
BM performance.

MUPR 2800 Accordion (2 Credits)  
BA music emphasis.

MUPR 2810 Accordion (4 Credits)  
BM performance.

MUPR 2900 Carillon (2 Credits)  

MUPR 2910 Carillon (4 Credits)  

MUPR 2920 Composition (2 Credits)  
One-on-one instruction for composition majors.
MUPR 2925 Composition (4 Credits)
One-on-one instruction for composition majors.

MUPR 3120 Alexander Technique (2 Credits)
The Alexander technique is a skill that can be incorporated into practice, performance, and everyday life. Using the principles discovered by F. Matthias Alexander, students will learn how to identify and change faulty patterns of thought and movement. Emphasis will be placed on recognizing how these patterns affect music-making in practice and performance. Lessons are individually tailored and topics may include injury recovery and prevention, pain and tension reduction, stress management, performance anxiety, freeing the breath, using the back effectively, balance, and ease of motion.

MUPR 3121 Alexander Technique (4 Credits)
The Alexander technique is a skill that can be incorporated into practice, performance, and everyday life. Using the principles discovered by F. Matthias Alexander, students will learn how to identify and change faulty patterns of thought and movement. Emphasis will be placed on recognizing how these patterns may affect music-making in practice and performance. Lessons are individually tailored and topics may include injury recovery and prevention, pain and tension reduction, stress management, performance anxiety, freeing the breath, using the back effectively, balance, and ease of motion. This class is tailored to the needs of students who are experiencing pain or injury and cannot take their regular studio lesson in a given quarter.

MUPR 3350 Organ Improvisation (2 Credits)
This course is designed for organ students to introduce them to the art of organ improvisation, hymn and ensemble playing, as well as all possible forms of accompaniment. It is meant for undergraduate students (upper division), graduate students, and artist diploma graduates. Prerequisites: knowledge of music history, figured bass, and counterpoint. Permission of instructor required.

Department of Philosophy

Office: Sturm Hall, Room 257
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2063
Email: philosophy@du.edu (philosophy@du.edu?subject=website inquiry)
Web Site: http://www.du.edu/ahss/philosophy

The curriculum in philosophy is designed to give students a broad grounding in the literature and methods of philosophy and in philosophical approaches to contemporary problems. Philosophy is inherently foundational for all other disciplines and philosophical training sharpens the student’s ability to reason soundly, to formulate basic concepts and questions clearly and to work intelligently at solving human problems.

The philosophy curriculum is balanced among historical study, philosophical problem areas and applied courses. Graduates from the philosophy department have distinguished themselves in a variety of fields. A 1982 graduate was recently nominated for a Pulitzer Prize and numerous former students have attended some of the country’s finest graduate programs. Study in philosophy provides an excellent basis for careers in law, business, government, journalism, teaching, social work and the sciences.

Philosophy

Bachelor of Arts Major Requirements
(183 credits required for the degree) (p. 38)

40 credits above the 1000 level, including the following:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbolic or practical logic</td>
<td>4</td>
</tr>
<tr>
<td>Ancient or medieval philosophy</td>
<td>4</td>
</tr>
<tr>
<td>Modern or contemporary philosophy</td>
<td>4</td>
</tr>
<tr>
<td>Courses at the 3000 level</td>
<td>16</td>
</tr>
<tr>
<td>Select an additional 12 credits of philosophy beyond the 1000 level</td>
<td>12</td>
</tr>
<tr>
<td>PHIL 3999 Philosophy Assessment (must complete prior to graduation)</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Credits 40

Secondary Major Requirements

40 credits. Same requirements as for BA degree.

Minor Requirements

20 credits in philosophy above the 1000 level.

Prerequisites
All seminars (3000-level courses) require at least junior standing or instructor's permission.

Courses

PHIL 1610 Discovering Philosophy (4 Credits)
In this course we explore a range of philosophical questions and examine the replies that have been made by historical figures. We also think through the methods and strategies that have been used for thinking through those replies and explore these questions further on our own. Topics may include how do we know what actions are moral? What is knowledge? What is the basic structure of the world? What is justice? What assumptions are made by the disciplines that take themselves to study the natural world? This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 1611 Philosophy and Social Justice (4 Credits)
This course examines classic works in the philosophy of social justice: social contract theories, theories of political obligation, and theories of justice, especially the theory of John Rawls. There is particular focus on civil disobedience, economic justice, equal opportunity, and community action. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 1992 Directed Study (1-10 Credits)

PHIL 2001 Philosophy and Fiction (4 Credits)
Examination of diverse aspects of the relationship between philosophy and fiction. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2003 Philosophy and Popular Culture (4 Credits)
This course critically explores philosophical questions and issues in the context of contemporary popular culture. On the one hand, it considers more general questions about the nature and function of popular culture, including how popular culture has been defined and "theorized"; the connections between popular culture and the traditional and new media; the economic bases and functions of popular culture; and the political implications of popular culture. On the other, it explores particular philosophical issues--historical, ethical, political, aesthetic, and metaphysical--as they appear in selected areas or examples of popular culture: literature, film, the visual arts, digital media, graphic novels, music, television, etc. The aims are both to enhance students' critical understanding of the ways in which philosophical assumptions and ideas underlie popular culture and to present traditional and contemporary philosophical arguments, movements, and ideas using examples drawn from popular culture as reference points. As examples, we might explore ethical dilemmas posed in the "Sopranos" or "Mad Men"; mind-body problems in the "Matrix" or "Avatar"; or metaphysical issues in "Donny Darko" or "Run, Lola, Run." This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2004 Philosophy of Race (4 Credits)
This course is a systematic study of the scientific, metaphysical, ethical, and political issues surrounding the notion of race. We undertake a critical study of the following questions: Is race a scientifically legitimate concept, or is it a social construct? Is race a legitimate census category? How should questions of race be decided, and by whom? Why do we think of humans in terms of race--for evolutionary or psychological reasons? Religious reasons? What is racism? Why is racism morally wrong? What do psychological studies show about our racist tendencies? Does affirmative action provide a morally acceptable way of achieving racial justice? What race is a mixed race person? This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2005 Philosophy of Religion (4 Credits)
What is God? Can God be known or is faith precisely a relationship to something that cannot be known in the ordinary sense? What is the relationship between God and morality? Between God and science? Is it more reasonable to believe that your religion is the only path to God or more reasonable to believe that God is manifest in many ways across different cultures? Is it reasonable to believe in God at all? If it is reasonable to believe in God, what are the reasons? And if believing in God is not based on reasons in the ordinary sense, are there philosophical grounds for believing in God anyway? This course takes a "God friendly" approach to philosophical questions about religion, setting out to investigate ontological and epistemological questions about belief-in-God toward the goal of understanding different ways that philosophers over the years have philosophically gone about developing, upholding, and taking about relationship with God. The course includes consideration of philosophers from analytic and continental traditions, from American and European schools of thought, from ancient, medieval, modern and post-modern traditions, and from Greek, Islamic, Jewish, and Christian traditions. Thinkers to be addressed include Pascal, Anselm, Plantinga, Van Inwagen, Hick, Hume, Descartes, Spinoza, Plato, Aristotle, Ibn Tufayl, Averroes, Maimonides, James, Levinas, Marion, Badiou, Rosenzweig, Aquinas, Buber, Cohen, Mill, Lycan, Kant, Wittgenstein, Kierkegaard, and Kafka. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with RLGS 2005.

PHIL 2006 Self, Soul, and Public (4 Credits)
This course examines the place of the individual in relationship to public life, systems of knowledge, and the natural world. It asks basic questions such as, Who am I? What is my place in the world? What is free will? What is the place of spirituality and contemplation in a secular society? Drawing from the humanities, natural sciences and social sciences, the course provides foundational material for responding to these questions. The methodology of the course is first-person experiential inquiry involving sustained periods of contemplation and meditation.

PHIL 2007 Philosophy and Video Games (4 Credits)
Traditional and novel metaphysical, ethical, political, and aesthetic issues both arising within video games and posed by this still developing medium. No prerequisites. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2010 Existentialism (4 Credits)
Philosophical, religious, literary and psychological views of the existentialists including Kierkegaard, Sartre, and Camus. This course counts toward the Analytical Inquiry: Society and Culture requirement.
PHIL 2014 Religious Existentialism: Christian and Jewish (4 Credits)
Existentialism focuses on the human experience of living, often with a focus on the sheer freedom of the human condition. Religious existentialism subtly modifies this picture through its own vision of human freedom as the ultimate encounter between the human subject and God (with 'God' understood in various ways). The religious existentialist in this sense philosophically explores that which is most-fully-human as a moment of relation and encounter between self and that which is beyond self. Starting with Sartre's non-religious statement of existentialism in Existentialism is a Humanism (1946), we go on to examine the Christian and Jewish existentialisms of Kierkegaard (1813-1855), Tillich (1886-1965), Buber (1878-1965), and Heschel (1907-1972). In the course of our reflections, we compare non-religious with religious approaches to basic questions about self, God and world, and we consider the relationship between Christian and Jewish existentialist approaches to these questions. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross-listed with RLGS 2014 and JUST 2014.

PHIL 2040 Practical Logic (4 Credits)
In this course students will learn how to identify and understand real arguments, the kinds of arguments that they confront everyday in the media, textbooks and periodicals, in addition to those made in philosophical writings. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement.

PHIL 2050 Jewish Philosophy (4 Credits)
This course sets out to explore the self and the sacred in Jewish tradition by exploring the nature of faith and reason, the call to ethical response, and the meaning of divine revelation in multiple Jewish philosophical voices across the ages, including Philo, Saadya, Halevi, Maimonides, Soloveitchik, Buber, Rosenzweig, and Levinas. This course counts toward the Analytical Inquiry: Society and Culture requirement. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2050.

PHIL 2080 Asian Philosophy (4 Credits)
Philosophical viewpoints, classical texts, and issues raised within one or more such traditions as Buddhism, Hinduism and Confucianism.

PHIL 2100 Philosophy of Mind (4 Credits)
Topics include nature of persons, consciousness, criteria of personal identity, the relation between mental and physical, and the role of neuroscience in the study of the mind—epistemological and ethical. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2110 Classical Greek Philosophy (4 Credits)
The philosophical thought of classical Greece that developed between about 500 and 300 BCE is the basis of all subsequent European philosophy and, arguably, of European culture itself. Besides its indisputable historical importance, it is also rich in ideas and insights that are as striking and relevant today as they were over 2000 years ago. This course serves as an introduction to this seminal period of philosophy, its historical and cultural context, and in fact, to philosophy itself. In the course, we focus primarily on the teachings of Socrates, the dialogues of his student Plato, and the writings of Plato's student Aristotle. In addition, we begin by considering the cultural and intellectual context, including the Homeric epics and the tragedies, that enabled such thinkers to arise and concludes with a brief look at the paths Greek philosophy took after the "Golden Age of Greece" has passed. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2111 Greek Moral Philosophy (4 Credits)
In this course we examine the "Good Life" in the writings of Plato, Aristotle, Epictetus and Lucretius and in selected Greek drama. Questions to be explored are as follows: What is justice? Why should I lead a just life? What is friendship? What is happiness? This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2120 Nature & Limits of Human Knowledge (4 Credits)
A study of both traditional and contemporary answers to the following questions: What is knowledge? How do we acquire it? What is the extent of our knowledge? This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2126 Suicide, Philosophy, Community (4 Credits)
Since its beginning among the ancient Greeks, the story of philosophy has been complexly intertwined with the two other stories, that of reflection on suicide, and that of reflection on the nature and nurture of community. In the first half of this course, we first examine a classic ancient Greek philosophical text addressing suicide, the we consider some 20th century philosophical reflections on that same topic, culminating in an impassioned defense – written and first published shortly before his own suicide by a philosophically trained writer who survived Auschwitz – of the individual’s right to choose “voluntary death.” Then, in the second half of the course, we turn to the issue of community, especially as thinking about the possibility of establishing a genuinely universal community inclusive of all humans without exception is surprisingly affected by serious reflection on the issues of suicide examined in the first part of the course. To aid and direct us, we examine some challenging contemporary philosophical writings concerning just such a possibility of truly inclusive human community. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2130 Philosophy of Early Modern Age (4 Credits)
Problems of reason and experience, mechanistic view of human beings, new interpretations of mind from Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2140 Kant to Nietzsche (4 Credits)
German idealism; human beings as self-consciousness; counter-concept of alienated existence; Kant, Hegel, Kierkegaard, Marx, Nietzsche. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2144 20th-Century Philosophy (4 Credits)
A general overview of prominent 20th-century philosophers and philosophical movements. This course counts toward the Analytical Inquiry: Society and Culture requirement.
PHIL 2145 Between Deleuze and Foucault (4 Credits)
Gilles Deleuze and Michel Foucault are widely accepted to be central figures of post-war French philosophy. Philosophers, cultural theorists, and others have devoted considerable effort to the critical examination of the work of each of these thinkers, but despite the strong biographical and philosophical connection between Foucault and Deleuze, very little has been done to explore the relationship between them. This course addresses the critical deficit by providing rigorous comparative discussions of the work of these two philosophers. The relationship between Foucault and Deleuze, however, is as strong as it is disparate: it is perhaps best described as a parallelism. As Deleuze says, “I never worked with Foucault. But I do think there are a lot of parallels between our work (with Guattari) and his, although they are, as it were, held at a distance because of our widely differing methods and even our objectives.” While the two were drawn together through their novel readings of Nietzsche, their commitment to a non-teleological theory of history, their activism in contemporary politics (with prisons, '68, Palestine, etc.), their return to the stoics, and a theory of the event, Deleuze and Foucault were often decisively divided in their methods and motivations. Through primary and secondary readings, this course focuses on the similarities and differences in between these two thinkers. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2150 Philosophy of Law (4 Credits)
Principles, aims and methods of legal reasoning (judicial decision making); relationship between legal and moral reasoning. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2160 Symbolic Logic (4 Credits)
Principles and methods of formal reasoning, their practical and philosophical applications. This course counts toward the Analytical Inquiry: The Natural and Physical World requirement. Cross listed with MATH 2050.

PHIL 2180 Ethics (4 Credits)
Alternative theories of morals and values, ethical problems and solutions offered by classical and contemporary thinkers. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2181 Aesthetics & Philosophy of Art (4 Credits)
Although critical reflection about art goes back at least to Plato, developments both in modern philosophy and in the arts themselves have produced an unprecedented, intense, and ongoing dialogue between artists and philosophers that has deeply affected the practices of both. Just as modern philosophers have come to view the arts as vitally important ways of experiencing and knowing, so modern artists have drawn heavily on philosophical ideas and views in creating their own works. The focus of this course is on some of the major ways in which new developments in the arts have influenced philosophical thought and have, in turn, been influenced by it. In particular, we consider some of the most representative artworks (many contemporary) that have raised the question, "Why is this art?" together with the major philosophical and critical theories that have attempted to respond to this question. Besides discussing specific works of art, we read and discuss some of the major statements and theories about them by both classical and contemporary philosophers, art historians and critics, and the artists themselves. This course is of interest both to students of philosophy wishing to explore contemporary developments in the arts as well as to art and art history students interested in a deeper understanding of the philosophical views that underlie so much modern and contemporary art. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2182 The Making of the Modern World: Science, Art, and Philosophy (4 Credits)
A combined on-campus/travel course exploring the ways in which the complex interactions among science, the arts, and philosophy served to create and define the 'modern world.' This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2184 Ethics, Individuals, & the Law (4 Credits)
Furnish students with a detailed and lasting understanding of a range of philosophical and ethical problems that arise in the law. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2200 Social & Political Philosophy (4 Credits)
Topics covered include the relation of the "social" to the "political," the nature and role of political ideology, issues in democracy and globalization. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2260 Philosophical Perspectives on Perception and Reality (4 Credits)
An examination of the theoretical hypothesis that our perceptions match up with, and therefore give us information about, an external and independent reality (what we call "the physical world"). In order to engage this issue, we look at the philosophical explorations of a number of historical figures in the Western philosophical tradition. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2401 Social Justice in a Global Context: Theory and Practice (4 Credits)
Theories of social justice, beginning with the ancient Hebrews and Greeks and running up through the modern era. The religious sources of these ideas, drawn primarily from the monotheistic faiths of Judaism, Christianity, and Islam, are profiled. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2700 Biomedical Ethics (4 Credits)
Discussion of some of the most pressing ethical issues engaged by contemporary developments in biology and medicine. This course counts toward the Analytical Inquiry: Society and Culture requirement.
PHIL 2701 Topics in Philosophy (1-4 Credits)
PHIL 2702 Topics in Philosophy (1-4 Credits)
PHIL 2703 Topics in Philosophy (1-4 Credits)
PHIL 2704 Topics in Philosophy (1-4 Credits)
PHIL 2705 Topics in Philosophy (1-4 Credits)
PHIL 2706 Topics in Philosophy (1-4 Credits)
PHIL 2707 Topics in Philosophy (1-4 Credits)
PHIL 2708 Topics in Philosophy (1-4 Credits)
PHIL 2709 Topics in Philosophy (1-4 Credits)
PHIL 2710 Topics in Philosophy (1-4 Credits)
PHIL 2711 Topics in Philosophy (1-4 Credits)
PHIL 2770 Philosophy of Science (4 Credits)
This course provides an introduction to some major topics in the philosophy of science focusing on issues concerning what science is and how it works, the scientific method, the objectivity of science and the goal of science. This course counts toward the Analytical Inquiry: Society and Culture requirement.

PHIL 2785 Environmental Ethics (4 Credits)
A study of current issues and controversies regarding the natural environment from a variety of philosophical and ethical perspectives, including anthropological, animal rights, "land ethic," deep ecology, eco-feminism, and postmodern approaches.

PHIL 2992 Directed Study (1-10 Credits)

PHIL 3000 Plato's Metaphysics (4 Credits)
A systematic study of Plato's Middle and Late Period Dialogues that focuses on his arguments for the existence of abstract objects and the development of Plato's theory of Forms. Prerequisite: At least Junior standing or permission of instructor.

PHIL 3003 Plato's Theory of Knowledge (4 Credits)
A systematic investigation of Plato's treatments of knowledge throughout the dialogues with a focus on the theory of recollection, Forms as objects of knowledge, the relationship between the Forms and perceptual experience, and the challenges posed by notions of true and false belief. Prerequisites: At least Junior standing or permission of instructor.

PHIL 3010 Great Thinkers: Aristotle (4 Credits)
A study of Aristotle's central theories and doctrines. Prerequisite: junior standing or instructor's permission.

PHIL 3023 Great Thinkers: Maimonides: Politics, Prophecy and Providence (4 Credits)
Using "The Guide for the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), one of the central figures in medieval philosophy and Jewish thought. Our study includes analyses of his ideas on principles of faith, human perfection, intellectual vs. "imaginational" approaches to truth, pedagogy and politics, reasons for the commandments, the nature of God and divine will, the limits of human knowledge, the mechanics of prophecy, and the parameters and implications of providence. Cross listed with RLGS 3023 and JUST 3023. Prerequisite: junior standing or instructor's permission.

PHIL 3024 Maimonides: Greek, Islamic, and Christian Encounters (4 Credits)
Using the "Guide of the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), a central figure in the history of philosophy and in the history of Jewish thought. In this course, we examine in depth the relationship between Maimonides' core ideas and various Greek, Muslim and Christian thinkers, including: Aristotle, Plotinus, al-Farabi, Avicenna (Ibn Sina), al-Ghazali, Averroes (Ibn Rushd), and Aquinas. Topics to be explored include: what is "metaphysics"?; God's unity and essence as existence itself; the mystery of knowing and not knowing God (including a consideration of God's ways as well as "negative theology"—viz. the extent to which we do not know God); God as pure intellect; the nature of the cosmos and the "separate intellects"; creation vs. eternity vs. emanation; philosophical and religious perspectives on the origins of the universe and implications for "living in the world with/out God." In our study, we will also address the methodological implications of cross-religious and cross-language analyses, and how to spot and address (in your own work and in the work of others) tacit cultural biases at play in the interpretive process. Cross listed with JUST 3024 and RLGS 3024. Prerequisite: Junior standing or instructor's permission.

PHIL 3050 Great Thinkers: Hume (4 Credits)
A detailed study of Hume's "radical" empiricism and its impact on contemporary analytic philosophy. Prerequisite: junior standing or instructor's permission.

PHIL 3061 Kant's Ethics/Aesthetics/Politics (4 Credits)
A study of Kant's "value theory" and its historical significance. Prerequisite: junior standing or instructor's permission.

PHIL 3062 Kant's Epistemology and Logic (4 Credits)
A study of Kant's theory of knowledge, logic and related issues. Prerequisite: junior standing or instructor's permission.
PHIL 3063 Kant on Religion (4 Credits)
A study of Immanuel Kant's major writings on religion and their subsequent influence on theology and the philosophy of religion. Prerequisite: junior standing or instructor's permission.

PHIL 3070 Great Thinkers: Hegel (4 Credits)
Hegel's "Phenomenology," later system and place in the history of modern philosophy. Prerequisite: junior standing or instructor's permission.

PHIL 3075 Marxism (4 Credits)
This course is a survey in the theoretical and political work influenced by the writings of 19th century philosopher and economist, Karl Marx. The course covers both the historical traditions in Marxism in the 19th, 20th, and 21st century as well as the geographical traditions of these time periods in France, Germany, England, Italy, Russia, China, and America. It is not necessary that students have a prior background in Marx's work, but it is highly recommended. Cross listed with ECON 3075.

PHIL 3090 Great Thinkers: Heidegger (4 Credits)
Study of "Being and Time" and related essays by a major 20th-century philosopher. Prerequisite: junior standing or instructor's permission.

PHIL 3092 Great Thinkers: The Later Heidegger (4 Credits)
Study of the works of Heidegger after 1930. Prerequisite: junior standing or instructor's permission.

PHIL 3101 Great Thinkers: Kierkegaard (4 Credits)
Each year, the philosophy department offers at least two courses in great thinkers. Specific figures may vary from year to year. Cross-listed with RLGS 3102. Prerequisite: 10 hours of Philosophy at the 2000 level or permission of instructor.

PHIL 3110 Contemplative Continental Philosophy: The Figure of the Migrant (4 Credits)
The 21st century has been described as the century of “people on the move” by UNHCR High Commissioner Antonio Guterres. Some 11 million people are refugees worldwide, fleeing political violence and/or persecution at home; whole more than 20 million are internally displaced within the borders of their own countries. Accordingly, the figure of the migrant/refugee has emerged as one of the most important, if not the most important, political figures of contemporary continental philosophy. Despite differences in philosophical orientation, thinkers such as Gilles Deleuze, Judith Butler, Jacques Ranciere, Julia Kristeva, Alain Badiou, and Jacques Derrida have all written at length on the centrality of the figure of the migrant for contemporary political thought. Not only does the figure of the migrant define the people of our time, according to many of these authors, it also defines a positive political way forward. This course thus provides not only a survey of the different traditions in contemporary European philosophy over the last twenty years (post-structuralism, deconstruction, neo-classicism, post-Marxism, third-wave feminism) but also offers a thematic look at the politico-philosophical figure of the migrant and other issues related to migration (human rights, borders, camps, sovereignty, territory, nomadism, and resistance).

PHIL 3120 Metaphysics (4 Credits)
In the course of this study, we will cover a broad range of philosophical topics falling within metaphysics, philosophy of language, philosophy of science, and epistemology. Prerequisite: junior standing or instructor's permission.

PHIL 3130 Knowledge Problems (4 Credits)
Problems in the foundations and justifications of claims to knowledge. Prerequisite: junior standing or instructor's permission.

PHIL 3146 Great Thinkers: Levinas (4 Credits)
Emmanuel Levinas (1906-1995), famous for his arresting and original idea of “ethics as first philosophy,” is an important figure in the histories of phenomenology, metaphysics, and theology. In this course, we set out to explore Levinas’ insights on ethics, alterity, and infinity, including the connection of his ideas to Plato, Descartes, Kant, and Husserl, as well as his critical responses to Heidegger and his positive contributions to Derrida. In this course, we work through Levinas' two major works, Ethics and Infinity and Otherwise Than Being or Beyond Essence, as well as a number of shorter writings—including material from his Talmudic commentaries. Themes to be covered include: Being, Goodness, Risk, Ethics, Alterity, Transcendence, Law, Judaism, Gift, Forgiveness, Politics, Theology, and Justice. This course is cross-listed with JUST 3146.

PHIL 3150 Metaphysics of Matter: Theory-Building from Science to Philosophy to Theology (4 Credits)
What is matter? How do we make sense of philosophical discussions of an “X I know not what”? Of a “nothing” which is something? Of a “pure potency” that lacks any actual characteristics? In what sense does matter mark the very limits of human theorizing, and how do theories of matter reveal differences (or similarities) between the methods of theorizing that we use in physics, metaphysics, and theology? In this course, we work to understand the metaphysics and metametaphysics of matter, focusing on a number of views of matter as well as on methodological questions of what it means to theorize about matter in (1) scientific, (2) philosophical, and (3) theological contexts. Drawing on theory ranging from ancient physics and cosmology to contemporary metametaphysics, philosophy of science, and philosophy of language, we engage in close readings of ancient, medieval, and modern texts to challenge the ways we theorize about matter (and theory itself) in the history of philosophy. Requires junior standing or higher.

PHIL 3152 Philosophy Meets Mysticism: A Greek, Jewish and Islamic Neoplatonic Journey (4 Credits)
Neoplatonism is a unique genre—somewhere between philosophy and mysticism. In this course, we investigate some of the leading themes of Neoplatonism, tracing the Greek ideas of Plotinus (the third century “father of Neoplatonism”) into later Jewish and Islamic textual traditions. As part of our journey, we will investigate a host of philosophical writings, including the Theology of Aristotle and the Liber de Causis, as well as works by Plato, Plotinus, Proclus, Ibn Tufayl, Acecenna, Isaac Israeli, Solomon Ibn Gabirol, and Abraham Ibn Ezra. Themes to be covered include emanation and creation, apophatic discourse, divine desire, the theological significance of imagination, inward reflection and the call to virtue. Prerequisite: junior standing or instructor's permission. Cross listed with JUST 3152.
PHIL 3175 Morality and the Law (4 Credits)
A systematic study of various elements of the relation between law and morality. Are we obligated to obey every law the government enacts? Why? If we do have an obligation to obey the law, are civil disobedients like Martin Luther King, Jr. justified in disobeying the law? Are immoral laws, laws at all, or must a law connect with some higher moral truth to have any authority? To what extent is it morally permissible for the law to restrict our personal freedoms? To what extent is it morally permissible for the law to enforce morality in general? If it is not permissible for the law to enforce morality, do we incur any obligation to obey the law? Prerequisite: junior standing or instructor’s permission.

PHIL 3176 Advanced Topics in Philosophy of Law: Rights, Legal Institutions, and Justice (4 Credits)
A critical examination of rights claims and an exploration of those rights claims ought to affect legal institutions. What are rights? How are they justified? How do various different rights claims conflict with each other? Does a theory or rights help provide a justified theory of criminalization? Are there any rights we have just in virtue of being human? How does the concept of human rights apply to issues such as international law, the right to life and whether human rights require a right to democracy?

PHIL 3177 Metaethics (4 Credits)
This course systematically and critically examines the metaphysical, semantic, and epistemic issues central to the study of metaethics. Do moral properties exist? If so, how are they related to natural properties? Do moral properties exist independent of human agency, or do we construct morality? If moral properties exist, how can we come to have justified belief about them? Is it possible to know that a moral belief is true? Doesn’t the phenomenon of widespread, intractable disagreement about moral matters establish that there are no objective moral truths? Is the process of gaining scientific knowledge really that different from the process of gaining moral knowledge? Prerequisite: junior standing or instructor’s permission.

PHIL 3178 Virtue Ethics (4 Credits)
Virtue ethics purportedly provides a distinct approach to moral deliberation, moral reasoning, moral decision-making, and moral justification. This course is a systematic study of the nature of virtue ethics, the nature of a virtue, and the alleged superiority of virtue ethics over its more familiar consequentialist and deontological alternatives. We also study various responses to the following questions: Have moral psychologists generated any valuable studies on the nature of virtue? What virtues ought we to endorse? At least Junior standing required or permission of the instructor.

PHIL 3180 Socratic Ethics (4 Credits)
A study of Plato’s early dialogues in order to discern the ethical views of the historical Socrates. Prerequisite: junior standing or instructor’s permission.

PHIL 3185 Philosophy of Action and Agency (4 Credits)
Wittgenstein once asked, “What is left over if I subtract the fact that my arm goes up from the fact that I raise my arm?” Understanding the difference between mere happening and an intentional action became central to the philosophical investigation of action and agency in the 20th century. In this course we examine this distinction and why it should matter to us. Our topics include intentional action, the causal theory of action, the metaphysics of action, agent causation, basic action, acting and trying to act, intentions, weakness of will, strength of will, and mental action. Requires junior standing or permission of instructor.

PHIL 3201 Wittgenstein, Quine, & Kripke on Necessity and a Priori Knowledge (4 Credits)
A study of Wittgenstein, Quine, and Kripke on the nature of necessity, a priori knowledge and their relation to understanding philosophy. Prerequisite: junior standing or instructor’s permission.

PHIL 3210 Philosophy of Movement (4 Credits)
Everything is in motion. Yet, philosophers have consistently considered motion to be a derivative or secondary form of being. Why? What are the political and metaphysical consequences of marginalizing motion in the history of philosophy? The aim of this class is to read the history of philosophy with a unique focus on the status of movement and motion from the ancient to contemporary period.

PHIL 3211 Contemporary Pol Philosophy (4 Credits)
This class focuses primarily on the philosophical problems generated by thinking about political authority and justice. We discuss the nature of political authority, justice, rights, equality and the role of property in a modern state.

PHIL 3215 Modern Jewish Philosophy (4 Credits)
Prerequisite: junior standing or instructor’s permission. Cross listed with JUST 3215.

PHIL 3450 Phenomenology and Theology (4 Credits)
Cross listed with RLGS 3455. Prerequisite: junior standing or instructor’s permission.

PHIL 3455 Philosophy and 9/11: Sovereignty in Traumatic Times (4 Credits)
Philosopher’s responses to the attacks on 9/11/2001, leading into philosophical study of the connections between trauma and modern assertions of political sovereignty. Prerequisite: junior standing or instructor’s permission.

PHIL 3460 Nietzsche & the Death of God (4 Credits)
This course involves an intensive reading and discussion of Friedrich Nietzsche’s ‘Thus Spake Zarathustra,’ together with relevant associated materials, especially ‘The Gay Science.’ Prerequisite: junior standing or instructor’s permission. Cross listed with RLGS 3460.

PHIL 3465 Derrida and Postmodernism (4 Credits)
Cross listed with RLGS 3465. Prerequisite: junior standing or instructor’s permission.

PHIL 3466 Contemporary Continental Philosophy (4 Credits)
A critical study of current trends in European philosophy, focusing on such thinkers as Deleuze, Badiou, Zizek, Meillassoux, or Laruelle. Prerequisite: junior standing or instructor’s permission.
PHIL 3610 Advanced Topics in Philosophy, Psychology, and Cognitive Science (4 Credits)
This course provides an advanced survey of conceptual and methodological issues that lie at the intersection of philosophy, psychology, and cognitive science. More specifically, our main goal is to engage in a critical discussion of how the study of the mind requires an interdisciplinary approach that integrates empirical findings with conceptual and philosophical theorizing. Cross listed with PSYC 3610. Prerequisites: PSYC 1001 and junior standing (or instructor approval).

PHIL 3618 Philosophy of Biology (4 Credits)
A survey of conceptual issues that lie at the intersection of biology and philosophy: the central concepts of evolutionary theory (such as natural selection, fitness, adaptation and function), the relation of biology to other "lower" sciences (can it be reduced to physics and chemistry?), whether there are genuine scientific laws in biology, and the relation between biology and other fields like cognitive science and ethics. At least Junior standing required.

PHIL 3620 Philosophical Perspectives on Economics and Social Sciences (4 Credits)
This course provides an advanced survey of conceptual and methodological issues that lie at the intersection of philosophy, economics, and the social sciences. More specifically, the main goal is to engage in a critical discussion of how sciences such as psychology, sociology, and neuroscience can challenge and modify the foundations and methodology of economic theories. The course is structured around three broad modules. After a brief introduction, we begin by discussing the emergence of rational choice theory which constitutes the foundation of classical and neoclassical economics and present some paradoxical implications of expected utility theory. The second module focuses on the relationship between economics and psychology. More specifically, we examine the emergence of behavioral economics, the study of the social, cognitive, and emotional factors on the economic decisions of individuals and institutions and their consequences for market prices, returns, and resource allocation. Finally, the third module focuses on the implications of neuroscience on decision making. We discuss some recent developments in neuroeconomics, a field of study emerged over the last few decades which seeks to ground economic theory in the study of neural mechanisms which are expressed mathematically and make behavioral predictions.

PHIL 3699 Proseminar in Philosophy (4 Credits)
Philosophy is a diverse discipline with various subfields, most of which are becoming increasingly specialized and methodologically autonomous. Specialization is often (rightly) perceived as an indicator of disciplinary progress and intellectual development. However, it is important that students of philosophy pursue breadth as well as depth. The goal of this course is to provide an overview of a series of seminal texts in philosophy, from a variety of subfields, epochs, and traditions. Each weekly meeting is devoted to the presentation, analysis, and discussion of a text that any student of philosophy should read at some point in her or his career. Requires junior standing or instructor's permission.

PHIL 3700 Topics in Philosophy (1-4 Credits)
Prerequisite: junior standing or instructor's permission.

PHIL 3701 Topics in Philosophy (1-4 Credits)
Prerequisite: junior standing or instructor's permission.

PHIL 3702 Topics in Philosophy (1-4 Credits)
Prerequisite: 10 hours of Philosophy at 2000 level or permission of instructor.

PHIL 3703 Topics in Philosophy (1-4 Credits)
Prerequisite: 10 hours of Philosophy at 2000 level or permission of instructor.

PHIL 3704 Topics in Philosophy (1-4 Credits)
Prerequisite: 10 hours of Philosophy at 2000 level or permission of instructor.

PHIL 3991 Independent Study (1-8 Credits)

PHIL 3992 Directed Study (1-10 Credits)

PHIL 3995 Independent Research (1-8 Credits)

PHIL 3999 Philosophy Assessment (0 Credits)
This course involves a required assessment of graduating philosophy majors' knowledge of the discipline based on coursework taken after completing 75% of their coursework. It is available to anyone who has completed at least 30 credits of philosophy courses and is required for graduation.

Department of Physics and Astronomy

Office: Physics Building, Room 211
Mail Code: 2112 E. Wesley Ave. Denver, CO 80208
Phone: 303-871-2238
Email: bstephen@du.edu
Web Site: http://www.physics.du.edu

The study of physics and astronomy is for anyone who wants to explore the workings of the natural world on scales from the subatomic to the cosmic. The department offers courses of study that can lead either to the BS (for those desiring more rigorous scientific coursework) or the BA (for those needing more flexibility in choosing courses, especially in combination with a non-science major). The BS degree offers three concentrations in the physics major (biological physics, computational physics, and nanophysics) that include additional interdisciplinary coursework from other science and engineering programs. Because of their training in critical thinking, physics and astronomy students acquire an excellent background for a wide variety of careers, including scientific research, medicine, law, finance, information technology, computer science, engineering, scientific or technical writing, K–
12 teaching and public education through museums or planetariums. A minor in physics, astrophysics or medical physics is a valuable addition to many majors and is attractive to employers. Our majors can pursue three dual degrees: BS in physics with MS in mechanical or electrical engineering, dual BA in physics and MBA degree with Daniels College of Business and a joint BA/BS in physics and MA/teaching license program with Morgridge College of Education.

Small class sizes and a low student to faculty ratio allow us to provide personal attention and individualized advising to each student. We also have a very active chapter of the Society of Physics Students that participates in many community outreach efforts and encourages informal interactions between students and faculty. Our faculty members, including eight new professors, conduct research in astrophysics, biophysics and condensed matter physics with an increasingly interdisciplinary focus. Undergraduate physics majors gain hands-on experience by participating in faculty research as well as pursuing internships at national laboratories and industrial firms. Our graduates go on to graduate or medical school, or pursue careers in industry, business, medical research, teaching, and the military.

Physics

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

52 credits of physics, 35 must be above PHYS 1999. Requirements include the following:

<table>
<thead>
<tr>
<th>Physics Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213 University Physics III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2251 Modern Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2252 Modern Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2260 Modern Physics Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 2259 Uncertainty and Error Analysis</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 3100 Senior Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 3111 Quantum Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3510 Analytical Mechanics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3611 Electromagnetism I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3841 Thermal Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Upper division courses above PHYS 1999</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>

Additional Requirements

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962 Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963 Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2070 Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

60 credits of physics, 45 must be above PHYS 1999. Requirements include:

<table>
<thead>
<tr>
<th>Physics Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1211 University Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1212 University Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 1213 University Physics III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2251 Modern Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2252 Modern Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>
PHYS 2260  | Modern Physics Lab  | 1
PHYS 2259  | Uncertainty and Error Analysis  | 2
PHYS 2311  | Intermediate Lab I  | 2
PHYS 2312  | Intermediate Lab II  | 2
PHYS 3100  | Senior Seminar ³  | 2
PHYS 3111  | Quantum Physics I  | 4
PHYS 3112  | Quantum Physics II  | 4
PHYS 3510  | Analytical Mechanics I  | 4
PHYS 3520  | Analytical Mechanics II  | 4
PHYS 3611  | Electromagnetism I  | 4
PHYS 3612  | Electromagnetism II  | 4
PHYS 3841  | Thermal Physics I  | 4

Total Credits  | 60

¹ May include PHYS 3991 Independent Study and PHYS 3995 Independent Research.
² Students pursuing concentrations will take at least 11 extra credits beyond the required 45 credits above PHYS 1999.
³ Senior Thesis required for Distinction in Physics.

Two minors are also required, at least one of which is in a BS degree-granting department. Completing the mathematics courses listed in Additional Requirements fulfills this second condition.

### Additional Requirements

#### Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1951</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1952</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1962</td>
<td>Honors Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 1953</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1963</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 2070</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2080</td>
<td>Calculus of Several Variables</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one sequence from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1010</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>&amp; CHEM 1240</td>
<td>and General Chemistry Lab</td>
</tr>
<tr>
<td>BIOL 1010</td>
<td>Physiological Systems</td>
</tr>
<tr>
<td>&amp; BIOL 1020</td>
<td>and Physiological Systems Lab</td>
</tr>
<tr>
<td>BIOL 1011</td>
<td>Evolution, Heredity and Biodiversity</td>
</tr>
<tr>
<td>&amp; BIOL 1021</td>
<td>and Evolution, Heredity and Biodiversity Lab</td>
</tr>
</tbody>
</table>

Total Credits  | 25

### Concentrations in The Physics Major

All three concentrations are only available in combination with the BS degree. The concentrations require at least additional 11 credits (i.e. in addition to the 45 credits of 2000+ PHYS coursework already required), which may include some courses in other departments. Other courses may be substituted for the concentration as approved by the department on a case-by-case basis. PHYS 3100 Senior Seminar in a field related to the concentration is required. (Senior Seminar will preferably be taken in the Fall Quarter of the Senior year.)

#### Biological Physics Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 4100</td>
<td>Foundations of Biophysics</td>
</tr>
</tbody>
</table>

Plus a minimum of 8 additional credit hours from the following list: ¹

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2110</td>
<td>Introduction to Computational Physics</td>
</tr>
<tr>
<td>PHYS 2300</td>
<td>Physics of the Body</td>
</tr>
<tr>
<td>PHYS 2340</td>
<td>Medical Imaging Physics</td>
</tr>
<tr>
<td>PHYS 3711</td>
<td>Optics I</td>
</tr>
<tr>
<td>BIOL 2120</td>
<td>Cell Structure and Function</td>
</tr>
<tr>
<td>BIOL 3150</td>
<td>Intracellular Dynamics</td>
</tr>
</tbody>
</table>
BIOL 3160  Biophysics: Ion Channels & Disease
BIOL 3640  Introductory Neurobiology
BIOL 4150  Special Topics in Adv Biology
CHEM 2011  Analysis Equilibrium Systems
CHEM 3610  Physical Chemistry I

Total Credits 11

1 At least one course from this list must be a BIOL or CHEM course.

Computational Physics Concentration Requirements

PHYS 2110  Introduction to Computational Physics 3

Plus a minimum of 8 additional credit hours from the following list:

COMP 1671  Introduction to Computer Science I
COMP 1672  Introduction to Computer Science II

Nanophysics Concentration Requirements

PHYS 4411  Advanced Condensed Matter I 3

Plus a minimum of 8 additional credit hours from the following list:

ENGR 3200  Introduction to Nanotechnology
ENME 2410  Materials Science I
ENME 2651  Fluid Dynamics I
PHYS 4100  Foundations of Biophysics
PHYS 4412  Advanced Condensed Matter II

Minor Requirements

At least 20 credits, including the following:

One year of introductory physics: 1

PHYS 1111  General Physics I
& PHYS 1112  and General Physics II
& PHYS 1113  and General Physics III

or

PHYS 1211  University Physics I
& PHYS 1212  and University Physics II
& PHYS 1213  and University Physics III
or PHYS 1214  University Physics III for Engineers

Two physics courses above PHYS 1999, excluding PHYS 4750 Seminar in Physics, Independent Study and Independent Research 2 6-8

Total Credits 20-23

1 or equivalent.

2 Science majors should consider taking PHYS 2251 Modern Physics I and PHYS 2252 Modern Physics II.

Astrophysics

Minor Requirements

20 credits required.

Students must complete one year of introductory physics or the equivalent (PHYS 1211 University Physics I, PHYS 1212 University Physics II and either PHYS 1213 University Physics III or PHYS 1214 University Physics III for Engineers) prior to beginning this minor.

At least 20 credits from the following list:

PHYS 2051  Bio-Astronomy of Solar Systems
PHYS 2052  Stellar Physics
PHYS 2053  Galaxies and Cosmology
PHYS 2061  Telescopes and Instrumentation
Medical Physics

Minor Requirements

At least 20 credits of physics. Requirements include the following:

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course Code &amp; Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111 &amp; PHYS 1112 &amp; PHYS 1113</td>
<td>14-15</td>
</tr>
<tr>
<td>PHYS 1211 &amp; PHYS 1212 &amp; PHYS 1213</td>
<td>14-15</td>
</tr>
<tr>
<td>PHYS 1214 or University Physics I &amp; University Physics II &amp; University Physics III</td>
<td>14-15</td>
</tr>
</tbody>
</table>

Plus:

<table>
<thead>
<tr>
<th>Course Code &amp; Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2300</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2340</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 20

Dual Degrees

The Bachelor of Science in Physics/Master of Science in Engineering (BS/MS) program allows a student to complete both a BS in physics and an MS in Engineering in only five years. This is an attractive option for those who want to combine a strong theoretical background with experience in engineering applications. Any subfield of engineering is eligible.

The Bachelor of Arts in Physics/Master of Business Administration (BS/MBA) option combines courses provided by the Department of Physics and by the Daniels College of Business. There are numerous rewarding opportunities for those with this preparation, particularly for those who seek to hold a variety of technical management positions.

The Bachelor of Arts or Science in Physics/Master of Arts in Curriculum and Instruction (BS/MA) and Teaching License option combines courses provided by the Department of Physics and Astronomy and by the DU College of Education for those seeking a career in K-6 to K-12 education.

For more information on any of these programs, please contact a Physics and Astronomy advisor. Students interested in these options should discuss them with an advisor as early as possible in their undergraduate careers.

Courses

**PHYS 1011 21st-Century Physics and Astronomy I (4 Credits)**

First class in a three-quarter sequence that explores the meaning of discoveries in our physical world in terms of astronomy and astrophysics, and how they shape modern research into our knowledge of the universe. In this course sequence, students (1) survey the fundamentals of the cutting-edge astronomy and astrophysics and (2) learn how physics works in explaining varieties of observed astronomical phenomena that encompass the origin and evolution of the universe and its contents--from galaxies to stars and planets. In this way students become familiar with the essential concepts of modern physics in terms of astronomy and astrophysics. Lab fee associated with these courses. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

**PHYS 1012 21st-Century Physics and Astronomy II (4 Credits)**

Second class in a three-quarter sequence that explores the meaning of discoveries in our physical world in terms of astronomy and astrophysics, and how they shape modern research into our knowledge of the universe. In this course sequence, students (1) survey the fundamentals of the cutting-edge astronomy and astrophysics and (2) learn how physics works in explaining varieties of observed astronomical phenomena that encompass the origin and evolution of the universe and its contents--from galaxies to stars and planets. In this way students become familiar with the essential concepts of modern physics in terms of astronomy and astrophysics. Lab fee associated with these courses. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.
PHYS 1013 21st-Century Physics and Astronomy III (4 Credits)
Third class in a three-quarter sequence that explores the meaning of discoveries in our physical world in terms of astronomy and astrophysics, and how they shape modern research into our knowledge of the nature of the universe. In this course sequence, students (1) survey the fundamentals of the cutting-edge astronomy and astrophysics and (2) learn how physics works in explaining varieties of observed astronomical phenomena that encompass the origin and evolution of the universe and its contents—from galaxies to stars and planets. In this way students become familiar with the essential concepts of modern physics in terms of astronomy and astrophysics. Lab fee associated with these courses. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement.

PHYS 1050 Descriptive Astronomy (4 Credits)
Introduction to the cosmos, including stars, galaxies, and origin and fate of universe; constellations and observing techniques. Includes laboratory and observing sessions at Chamberlin Observatory's 20-inch refractor telescope.

PHYS 1070 Solar System Astronomy (4 Credits)
Introduction to advances in knowledge of atmospheres, surfaces and interiors of other planets in our solar system and elsewhere; emphasis on interpretation and significance of discoveries for the nonspecialist. Includes observing at Chamberlin Observatory. Recommended Prerequisite: PHYS 1050.

PHYS 1090 Cosmology (4 Credits)
Companion to PHYS 1070. Discoveries of modern era concerning stars, galaxies, and origin and fate of universe, to aid appreciation of new discoveries. Open to majors and non-majors in the sciences. Includes scheduled observing at Chamberlin Observatory. Recommended Prerequisite: PHYS 1050.

PHYS 1111 General Physics I (5 Credits)
This is the first of a three-quarter sequence for students in any Natural Science and Mathematics field of study. The course stresses physics concepts rather than equation derivation as in the calculus-based course (PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214). Algebra and trigonometry are used regularly to solve problems and make predictions. Includes topics in mechanics (kinematics, dynamics) including forces, one and two dimensional motion, work, energy and momentum. The course includes a rigorous algebra-based laboratory that exposes students to a broad range of the real physical phenomena investigated using equipment as well as computerized instrumentation and data acquisition techniques. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisites: high school algebra, trigonometry. Students majoring in physics or engineering are required to take PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214. Lab fee associated with this course.

PHYS 1112 General Physics II (5 Credits)
This is the second of a three-quarter sequence for students in any Natural Science and Mathematics field of study. The course stresses physics concepts rather than equation derivation as in the calculus-based course (PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214). Algebra and trigonometry are used regularly to solve problems and make predictions. Includes topics in rotational motion, torque, vibrations, fluids, heat and thermodynamics, kinetic theory, and particles and matter waves. The course includes a rigorous algebra-based laboratory that exposes students to a broad range of the real physical phenomena investigated using equipment as well as computerized instrumentation and data acquisition techniques. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisites: high school algebra, trigonometry. Students majoring in physics or engineering are required to take PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214. Lab fee associated with this course.

PHYS 1113 General Physics III (5 Credits)
This is the third of a three-quarter sequence for students in any Natural Science and Mathematics field of study. The course stresses physics concepts rather than equation derivation as in the calculus-based course (PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214). Algebra and trigonometry are used regularly to solve problems and make predictions. Includes topics in rotational motion, torque, vibrations, fluids, heat and thermodynamics, kinetic theory, and particles and matter waves. The course includes a rigorous algebra-based laboratory that exposes students to a broad range of the real physical phenomena investigated using equipment as well as computerized instrumentation and data acquisition techniques. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisites: high school algebra, trigonometry. Students majoring in physics or engineering are required to take PHYS 1211/PHYS 1212/PHYS 1213 or PHYS 1214. Lab fee associated with this course.

PHYS 1200 Physics Preparatory (2 Credits)
This course is strongly recommended to everyone considering a major in physics and astronomy. It introduces students to problems, techniques, and tools used in physics and astronomy and offers an overview of the research carried out in the Department of Physics and Astronomy. High-school physics knowledge is not required.

PHYS 1211 University Physics I (5 Credits)
First of a three-quarter sequence. Kinematics, vectors, force, energy and work, linear momentum, rotation of rigid bodies. Required for all physics and engineering majors and recommended for all science majors who are also required to take calculus. The course includes a rigorous calculus-based laboratory that exposes students to a broad range of the real physical phenomena studied in the lecture course. Through the use of experimental apparatus, computerized instrumentation and data acquisition, data analysis and graphical representation, students use the observed phenomena to exemplify the laws of physics. Physics theory and other relevant background information are explored individually by students in weekly prelab exercises. Students learn to write introductory-level laboratory reports and become familiar with good laboratory technique. Emphasis for this lab is on mechanics. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Corequisite: MATH 1951.

PHYS 1212 University Physics II (5 Credits)
Second of a three-quarter sequence. Gravitation, fluids; oscillatory motion; waves; thermal physics. Required for all physics and engineering majors and recommended for all science majors who are also required to take calculus. The lab portion of this course is a continuation of the PHYS 1211 lab portion and builds on laboratory skills and knowledge from that course. Emphasis for this lab is on waves, oscillations, sound, fluids and thermodynamics. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Prerequisite: PHYS 1211. Corequisite: MATH 1952.
PHYS 1213 University Physics III (5 Credits)
Third of a three-quarter sequence. Electrostatics, electric circuits, magnetism and electromagnetism; electromagnetic waves. Required for all physics and engineering majors and recommended for all science majors who are also required to take calculus. The lab portion of this course is a continuation of the PHYS 1221 and 1222 lab portions and builds on the students’ laboratory skills and knowledge from those labs. Emphasis for this lab is on electricity, magnetism and circuits. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Cross listed with PHYS 1214. Prerequisite: PHYS 1212. Corequisite: MATH 1953.

PHYS 1214 University Physics III for Engineers (4 Credits)
This is the third course of a three-quarter sequence and is for engineers only; this is equivalent to PHYS 1213, but does not include lab component. Electrostatics, electric circuits, magnetism and electromagnetism; electromagnetic waves. Required for all engineering majors. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Cross listed with PHYS 1213. Prerequisite: PHYS 1212. Corequisite: MATH 1953.

PHYS 1215 University Physics III for Engineers (4 Credits)
This is the third course of a three-quarter sequence and is for engineers only; this is equivalent to PHYS 1213, but does not include lab component. Electrostatics, electric circuits, magnetism and electromagnetism; electromagnetic waves. Required for all engineering majors. This course counts toward the Scientific Inquiry: The Natural and Physical World requirement. Cross listed with PHYS 1213. Prerequisite: PHYS 1212. Corequisite: MATH 1953.

PHYS 1991 Independent Study (1-10 Credits)
PHYS 1992 Directed Study (1-10 Credits)
PHYS 1995 Independent Research (1-10 Credits)

PHYS 2011 Circuits I (3 Credits)
Cross-listed with ENEE 2012. An introduction to electrical circuits analysis and design. Emphasis is on definitions of basic variables, passive circuit components and the ideal operational amplifier. DC analysis of circuits and circuit theorems are stressed. AC signals are introduced. Computer analysis software is integrated throughout the course. Cross listed with ENEE 2011. Co-requisites: PHYS 1213 or 1214, MATH 1953, PHYS 2015 or instructor's permission.

PHYS 2015 Engineering Applications I (1 Credit)

PHYS 2020 Circuits II (3 Credits)
Cross-listed with ENEE 2020. AC analysis of linear circuits to include circuit theorems via classical and transform techniques. Emphasis is on Laplace transform, including use of pole-zero and Bode diagrams to analyze and design circuits, including multiple filters (single-pole cascade, Butterworth, Chebyshev), and step response circuits. Phasors applications to sinusoidal steady state analysis and AC power. Computer analysis software is used as an aid to circuit design. Cross listed with ENEE 2021. Prerequisites: PHYS 2011, PHYS 2015. Corequisites: PHYS 2025, MATH 2070.

PHYS 2025 Engineering Applications II (1 Credit)
Cross-listed with ENEE 2025. Laboratory program practicing time and frequency domain analysis and design techniques on step response and filter problems. Applications to instrumentation and circuits. Cross listed with ENEE 2025. Prerequisite: PHYS 2011. Corequisite: PHYS 2021 or instructor's permission.

PHYS 2051 Bio-Astronomy of Solar Systems (4 Credits)
The nature of our solar system, and those of recently discovered solar systems around other stars, will be examined using the tools of modern physics and astronomy, with a focus on biogenic opportunities in these diverse environments. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1111 or PHYS 1211 or instructor's permission.

PHYS 2052 Stellar Physics (4 Credits)
The physics of stars will be examined using the tools of modern physics and astronomy, with the focus on their structure, interiors, origin and evolution, including single and multiple star systems, white dwarf, neutron stars and black holes. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1111 or PHYS 1211 or instructor's permission.

PHYS 2053 Galaxies and Cosmology (4 Credits)
Modern discoveries involving galaxies in our universe and cosmological theories based on these and particle physics findings will be examined using the tools of modern physics and astronomy. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1111 or PHYS 1211 or instructor's permission.

PHYS 2061 Telescopes and Instrumentation (4 Credits)
The student will develop and refine facility and experience with telescopes, software, methods, catalogs, libraries, astronomical instrumentation and assorted contents of the universe, including ground-based and space-based telescopes and detector systems. Observing projects included; use of the Student Astronomy Lab and/or internet telescope(s) for observing projects and variable star monitoring, plus occasional use of the 20 inch Clark/Saegmuller refractor or Mt. Evans reflectors for observing, measuring and practicing public instruction. Math tools include algebra, statistics, Excel, Mathcad, IDL, C++, etc. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1112 or PHYS 1212 or instructor's permission.

PHYS 2062 Astronomy with Digital Cameras (4 Credits)
The revolution brought about with digital recording systems has revolutionized astronomy by providing access to faint source imaging and in-depth astronomical spectroscopy not possible during the photographic era. This course will train students to apply this technology to problems associated with light and spectrum measurement that facilitate tests of modern astrophysical theories. Each student will select an observing project to develop during the term, pursue data collection and analysis at the Student Astronomy Lab or other telescope(s), and report results on a personal website and/or in poster format. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1113 or PHYS 1213 or instructor's permission.
PHYS 2063 Observing & Data Analysis (4 Credits)
In this summer-only class, the student will learn fundamentals of astronomical research with hands-on observing and data analysis opportunities at DU's Meyer-Womble Observatory located high atop Mt. Evans, 35 miles west of campus. Good health is essential to withstand the rigors of high altitude and nighttime work at this remarkable site. Contact the instructor for guidelines and details. Credit can apply toward physics or astrophysics minor. Prerequisite: PHYS 1050 or PHYS 1070 or PHYS 1090 or PHYS 1111 or PHYS 1211 or instructor's permission.

PHYS 2110 Introduction to Computational Physics (3 Credits)
Application of computational mathematics packages and spreadsheet programs to a variety of physics problems; numerical differentiation and integration, solution of differential equations, matrix calculations, computer graphics. Includes lecture and laboratory. Prerequisites: PHYS 1113, PHYS 1213 or PHYS 2124 and MATH 1953.

PHYS 2251 Modern Physics I (4 Credits)
First of a two-quarter sequence. Topics covered: Introduction to special relativity; photons, de Broglie wavelength, Heisenberg uncertainty principles, quantum numbers and invariance principles; introduction to quantum physics of atoms, molecules, solids and nuclei; radioactive decay; elementary particles. Prerequisites: PHYS 1113, PHYS 1213 or PHYS 1214 and MATH 1953. Corequisite: MATH 2070.

PHYS 2252 Modern Physics II (4 Credits)

PHYS 2259 Uncertainty and Error Analysis (2 Credits)
In this course, students will build on the laboratory experience gained in University Physics Lab. Students will learn why uncertainty analysis is crucial to reducing and correcting errors in science. Additionally, students will develop the theory behind, and learn how to carry out, uncertainty and data analysis calculations. Uncertainty analysis topics include statistical analysis of data, propagation of error, the normal distribution, rejection of data, weighted averages, least-squares fitting, covariance and correlation, the binomial and Poisson distributions, and the chi-squared test. Strong emphasis for this course is placed on having students develop independence with their laboratory skills, as well as preparing students for Modern Physics Lab (PHYS 2260). Prerequisites: PHYS 1213 or PHYS 1214 and MATH 1953 or MATH 1963.

PHYS 2260 Modern Physics Lab (1 Credit)
Laboratory to accompany PHYS 2252. Students will perform laboratories that demonstrate special relativity, the wave/particle duality of light, the quantization of charge, and the discrete nature of energy levels in bound systems. Laboratories include the Michelson-Morley experiment, spectroscopy, blackbody radiation, laser diffraction and the double slit experiment, the photoelectric effect, the Millikan oil drop experiment, the charge-to-mass ratio of the electron, and the Franck-Hertz experiment. Students will apply uncertainty and error analysis to real experimental data. Strong emphasis for this lab is placed on having students develop independence with their laboratory skills. A Windows-based laptop computer is required for this lab. Lab fee associated with this course. Prerequisites: PHYS 2259 and MATH 2070. Corequisite: PHYS 2252.

PHYS 2261 Introductory Modern Physics (4 Credits)
First of a two-quarter sequence. Topics covered: Introduction to special relativity; photons, de Broglie wavelength, Heisenberg uncertainty principles, quantum numbers and invariance principles; introduction to quantum physics of atoms, molecules, solids and nuclei; radioactive decay; elementary particles. Prerequisite: PHYS 1213 or PHYS 1214 and MATH 1953.

PHYS 2262 Modern Physics Lab (1 Credit)
Laboratory to accompany PHYS 2261. Students will perform laboratories that demonstrate special relativity, the wave/particle duality of light, the quantization of charge, and the discrete nature of energy levels in bound systems. Laboratories include the Michelson-Morley experiment, spectroscopy, blackbody radiation, laser diffraction and the double slit experiment, the photoelectric effect, the Millikan oil drop experiment, the charge-to-mass ratio of the electron, and the Franck-Hertz experiment. Students will apply uncertainty and error analysis to real experimental data. Strong emphasis for this lab is placed on having students develop independence with their laboratory skills. A Windows-based laptop computer is required for this lab. Lab fee associated with this course. Prerequisites: PHYS 2261 and MATH 2070. Corequisite: PHYS 2262.

PHYS 2271 Introduction to Chaos (2 Credits)

PHYS 2272 Chaos Lab (1 Credit)
Laboratory to accompany PHYS 2271. Students will perform laboratories that demonstrate special relativity, the wave/particle duality of light, the quantization of charge, and the discrete nature of energy levels in bound systems. Laboratories include the Michelson-Morley experiment, spectroscopy, blackbody radiation, laser diffraction and the double slit experiment, the photoelectric effect, the Millikan oil drop experiment, the charge-to-mass ratio of the electron, and the Franck-Hertz experiment. Students will apply uncertainty and error analysis to real experimental data. Strong emphasis for this lab is placed on having students develop independence with their laboratory skills. A Windows-based laptop computer is required for this lab. Lab fee associated with this course. Prerequisites: PHYS 2259 and MATH 2070. Corequisite: PHYS 2252.

PHYS 2280 Quantum Mechanics (5 Credits)
First of a two-quarter sequence. Topics covered: Introduction to quantum mechanics; photons, de Broglie wavelength, Heisenberg uncertainty principles, quantum numbers and invariance principles; introduction to quantum physics of atoms, molecules, solids and nuclei; radioactive decay; elementary particles. Prerequisite: PHYS 1213 or PHYS 1214 and MATH 1953.

PHYS 2311 Intermediate Lab I (2 Credits)
In this lab, students learn to develop laboratory instrumentation to make physical measurements using electronic circuitry and the personal computer. Laboratory exercises include a review of DC circuits including transistors, LabVIEW programming, the PC parallel port, AC circuits and the oscilloscope, operational amplifiers and the RS-232C serial port. Strong emphasis for this lab is placed on having students develop independence with their laboratory skills. A Windows-based laptop computer is required for this lab. Lab fee associated with this course. Prerequisites: PHYS 2261 and MATH 2070.

PHYS 2312 Intermediate Lab II (2 Credits)
This lab is a continuation of PHYS 2311 and builds heavily on the concepts learned during that first quarter. Laboratory exercises include using the personal computer, LabVIEW programming, and electronic circuitry for single point and waveform data acquisition including the Fast Fourier Transform, GPIB and serial devices, transducers, controls and feedback systems, counting, and timing. Strong emphasis for this lab is placed on having students develop independence with their laboratory skills. Prerequisite: PHYS 2311.

PHYS 2313 Intermediate Lab III (2 Credits)
This lab is the final lab in the Intermediate Lab sequence. Students leverage the knowledge gained in the first two quarters to perform physics experiments using electronic circuitry and the personal computer. It is expected that students will be independent in their ability to perform in the laboratory. Prerequisite: PHYS 2312.

PHYS 2340 Medical Imaging Physics (3 Credits)
This is the second course required for a medical physics minor, following Physics of the Body (PHYS 2300). X-rays; nuclear medicine instrumentation; radiography and fluoroscopy; computed tomography; ultrasound; magnetic resonance imaging; radiobiology. Prerequisites: PHYS 1113, PHYS 1213 or PHYS 1214 and PHYS 2300.
PHYS 2510 Applied Mechanics I (3 Credits)
First of a three-quarter sequence. Co-listed with ENME 2510. Statics of particles, equivalent systems of forces, centroids and center of gravity, frames and machines, friction, moments of inertia, method of virtual work. Kinematics of particles, Newton's second law, energy and momentum methods for particles and systems of particles, angular momentum, central force motion, impulsive motion, kinematics and motion of rigid bodies in two and three dimensions; accelerated frames of reference; mechanical vibrations. Cross listed with ENME 2510. Prerequisite: PHYS 1211.

PHYS 2520 Applied Mechanics II (3 Credits)
Second of a three-quarter sequence. Statics of particles, equivalent systems of forces, centroids and center of gravity, frames and machines, friction, moments of inertia, method of virtual work. Kinematics of particles, Newton's second law, energy and momentum methods from particles and systems of particles, angular momentum, central force motion, impulsive motion, kinematics and motion of rigid bodies in two and three dimensions; accelerated frames of reference; mechanical vibrations. Cross listed with ENME 2520. Prerequisites: PHYS 2510, ENGR 3610.

PHYS 2530 Applied Mechanics III (3 Credits)
Third of a three-quarter sequence. Statics of particles, equivalent systems of forces, centroids and center of gravity, frames and machines, friction, moments of inertia, method of virtual work. Kinematics of particles, Newton's second law, energy and momentum methods from particles and systems of particles, angular momentum, central force motion, impulsive motion, kinematics and motion of rigid bodies in two and three dimensions; accelerated frames of reference; mechanical vibrations. Cross listed with ENME 2530. Prerequisites: PHYS 2520, ENGR 3610.

PHYS 2555 Mechanics I (4 Credits)
First of a two-quarter sequence. Topics include motion of a particle and of particle systems, conservative and nonconservative forces, statics and dynamics of rigid bodies, gravitation, moving coordinate systems, small vibrations and normal modes, and introduction to Lagrangian and Hamiltonian mechanics. Prerequisites: PHYS 1113, PHYS 1213, or PHYS 1214 and MATH 2070.

PHYS 2556 Mechanics II (4 Credits)
Second of a two-quarter sequence. Topics include motion of a particle and of particle systems, conservative and nonconservative forces, statics and dynamics of rigid bodies, gravitation, moving coordinate systems, small vibrations and normal modes, and introduction to Lagrangian and Hamiltonian mechanics. Prerequisite: PHYS 2555.

PHYS 2830 Natural Optics (3 Credits)
An investigation of naturally occurring optical phenomena with an emphasis on observational characteristics and causes. Prerequisite: PHYS 1113, PHYS 1213 or PHYS 1214 or instructor's permission.

PHYS 2991 Independent Study (1-10 Credits)

PHYS 2992 Directed Study (1-10 Credits)

PHYS 2995 Independent Research (1-10 Credits)

PHYS 3100 Senior Seminar (2 Credits)
This course offers primers on literature research, practices of a good scientific writing, putting together a good presentation or report, carrying out and documenting research, preparing for graduate program and/or job. Required for all Physics majors.

PHYS 3111 Quantum Physics I (4 Credits)
First of a two-quarter sequence. The Schrödinger equation: interpretation of wave functions; the uncertainty principle; stationary states; the free particle and wave packets; the harmonic oscillator; square well potentials. Hilbert space: observables, commutator algebra, eigenfunctions of a Hermitian operator; the hydrogen atom and hydrogenic atoms. Prerequisites: PHYS 2252, PHYS 2260, PHYS 2556, PHYS 3612 and MATH 2070.

PHYS 3112 Quantum Physics II (4 Credits)
Second of a two-quarter sequence. Angular momentum and spin; identical particles; the Pauli exclusion principle; atoms and solids: band theory; perturbation theory; the fine structure of hydrogen; the Zeeman effect; hyperfine splitting; the variational principle; the WKB approximation; tunneling; time dependent perturbation theory; emission and absorption of radiation. Scattering: partial wave analysis; the Born approximation. Prerequisite: PHYS 3111.

PHYS 3251 Astrophysics: Radiative Processes (4 Credits)
Because light is the primary means by which astronomers learn about the Universe, understanding the production and subsequent behavior of light is key to interpreting astronomical observations. This course introduces students to the physics of astrophysical radiation and its interaction with matter as it travels from its source to our detectors. Topics may include radiative transfer, emission and absorption processes, Compton processes, synchrotron radiation, thermodynamic equilibrium, radiative and collisional excitation, and spectroscopy of atoms and molecules. The course is aimed at advanced undergraduates, as well as graduate students focusing on astrophysics research. Prerequisites: PHYS 2252 and consent of instructor.

PHYS 3252 Astrophysics: Observations (4 Credits)
Astronomy is fundamentally an observational science and as such it is important for practitioners to understand how their data are collected and analyzed. This course is therefore a comprehensive review of current observational techniques and instruments, aimed at advanced undergraduates, as well as graduate students focusing on astrophysics research. This class introduces students to the capabilities and limitations of different types of instruments while exploring the sources and types of noise and providing statistical tools necessary for interpreting observational data. Prerequisites: PHYS 2252 and consent of instructor.

PHYS 3270 Workshop: Practical Astronomy (1-5 Credits)
Capstone coursework featuring studies in experimental, computational, and/or theoretical work in astronomy and astrophysics.
PHYS 3311 Advanced Laboratory I (1 Credit)
First of a three-quarter sequence. Advanced experimental techniques in physics. Meets with PHYS 2311. Prerequisite: instructor's permission.

PHYS 3312 Advanced Laboratory II (1 Credit)
Second of a three-quarter sequence. Advanced experimental techniques in physics. Meets with PHYS 2312. Prerequisite: instructor's permission.

PHYS 3313 Advanced Laboratory III (1 Credit)
Third of a three-quarter sequence. Advanced experimental techniques in physics. Meets with PHYS 2313. Prerequisite: instructor's permission.

PHYS 3510 Analytical Mechanics I (4 Credits)
Lagrangian and Hamiltonian mechanics. Prerequisites: PHYS 1113, PHYS 1213, or PHYS 1214 and MATH 2070 and consent of instructor.

PHYS 3520 Analytical Mechanics II (4 Credits)
Second of a two-quarter sequence: two-body central force problems, moving coordinate systems, rotational motion of rigid bodies, coupled oscillations and normal modes, and Hamiltonian mechanics. Prerequisite: PHYS 3510.

PHYS 3611 Electromagnetism I (4 Credits)
First of a two-quarter sequence. Vector algebra; differential vector calculus (gradient, divergence and curl); integral vector calculus (gradient, divergence and Stokes' Theorems); line, surface and volume integrals; Electrostatics: the electric field, electric potential, work and energy in electrostatics; method of images, boundary value problems and solutions to Laplace’s equation in Cartesian, spherical and cylindrical coordinates; multipole expansion of the electric potential; electric fields in matter: polarization; the electric displacement vector; boundary conditions, linear dielectrics. Magnetostatics: magnetic fields and forces. Prerequisites: PHYS 1113, PHYS 1213, or PHYS 1214 and MATH 2070.

PHYS 3612 Electromagnetism II (4 Credits)
Second of a two-quarter sequence. Magnetic vector potential; magnetic fields in matter: magnetization; fields of magnetized objects; linear and nonlinear magnetic materials; electromotive force, Ohm’s law; electromagnetic induction; Faraday’s law; Maxwell’s equations; the displacement current; boundary conditions; the Poynting theorem; momentum and energy density of the fields; the Maxwell stress tensor; the wave equation and electromagnetic waves in vacuum and matter; absorption and dispersion; wave guides; the potential formulation and gauge transformations; retarded potentials; dipole radiation. Prerequisite: PHYS 3611.

PHYS 3700 Advanced Topics: General (3 Credits)
Offered irregularly, depending on demand. May be taken more than once for credit. Prerequisite: instructor's permission.

PHYS 3711 Optics I (4 Credits)
First of a two-quarter sequence. Gaussian optics and ray tracing; matrix methods and application to optical design; elementary theory of aberrations; light as electromagnetic wave, diffraction and interference; interferometers and their applications. Elementary theory of coherence; selected topics. May include laboratory work as appropriate. Prerequisites: PHYS 1113, PHYS 1213 or PHYS 1214, and MATH 2070.

PHYS 3841 Thermal Physics I (4 Credits)
First of a two-quarter sequence. Laws of thermodynamics; thermal properties of gases and condensed matter; kinetic theory of gases, classical and quantum statistics. Prerequisites: PHYS 1113, PHYS 1213 or PHYS 1214 and MATH 2070.

PHYS 3991 Independent Study (1-8 Credits)
PHYS 3992 Directed Study (1-10 Credits)
PHYS 3995 Independent Research (1-10 Credits)

Department of Political Science

Office: Sturm Hall, Room 466
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2743
Email: polisci@du.edu
Web Site: http://www.du.edu/ahss/polisci/

The Department of Political Science offers a broad education focused on several enduring concerns in the study of political life: political theory, centering on the philosophical and moral foundation of political life; comparative and international politics, focusing on political developments and interactions around the world; American politics, concerning the study of American political institutions and processes; and law, studying legal institutions and practice in political and social life.

Teaching

In teaching, the Department of Political Science is dedicated to providing a rigorous liberal arts experience for undergraduates. Classes emphasize the development of critical reading, thinking, writing and speaking skills in addition to learning about politics. The department also encourages development of a commitment to public service, an understanding of active citizenship and the development of political organizational skills via internship programs and service learning. In addition, the department encourages students to participate in the Cherrington Global Scholars program, where students gain new perspectives at institutions abroad. For qualified students, a departmental honors program also allows students to engage in substantial research projects that are closely directed by department faculty members.
Research

Scholarly research—including publications in academic journals and books, as well as presentations at professional conferences—is an essential component of the mission of the department. The department views teaching and research as complementary activities, central to the undergraduate experience. Active research and engagement in the discipline encourage improvement in teaching methods and substance. Much of our research also provides an opportunity for advanced undergraduates to work with department faculty; faculty have sponsored many students through the Partners in Scholarship program. Faculty and student research has received support from the American Political Science Association, National Science Foundation, the Ford Foundation, the Social Science Research Council, the Fulbright Program and the European University Institute.

Student Engagement

In addition to teaching and scholarly engagement with students, the department sponsors Pi Sigma Alpha, the national political science honors society, which hosts outside speakers and provides opportunities to participate in special conferences. Internship seminars place students in public administration, legislative, legal and judicial settings in Denver and Washington, D.C. Students participate in discussions, prepare research and position papers and gain valuable work experience, often leading to future employment opportunities.

Political Science

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

40 credits in political science, with at least 28 credits at the 2000 or 3000 level.

Introductory Courses

Complete two of four:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 1000</td>
<td>Introduction to American Politics</td>
</tr>
<tr>
<td>PLSC 1110</td>
<td>Comparing Politics around the World</td>
</tr>
<tr>
<td>PLSC 1610</td>
<td>Introduction to Political Thought: Power, Liberty, and Justice</td>
</tr>
<tr>
<td>PLSC 1810</td>
<td>Introduction to Law and Society</td>
</tr>
</tbody>
</table>

Upper Division Sub-field Requirements

Complete one course at the 2000 or 3000 level in each of the four departmental sub-fields: American Politics, Comparative and International Politics, Law, Political Theory.  

Electives

Complete any two political science courses.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 2901</td>
<td>Political Inquiry</td>
</tr>
<tr>
<td>PLSC 3290</td>
<td>Capstone Seminar in Politics</td>
</tr>
</tbody>
</table>

Total Credits

40

Secondary Major Requirements

40 credits. Same requirements as for BA degree.

Minor Requirements

Minimum of 20 credits in political science, with at least 12 credits at the 2000 or 3000 level.

Departmental Internship Program

Internships for academic credit are offered in the concentrations of American politics and law; they require attendance in a seminar with other students completing an internship. Internships may be taken only after the completion of one course in the relevant concentration. No more than 4 credits earned in a departmental internship may be counted toward the 40 credits required of majors, though if a student earns more than four credits, those credits may be counted toward the maximum of 60 credits in political science.

Disciplinary Subfields

American Politics

This field contains courses that deal with the institutions, processes, concepts, and history of American politics.
**Comparative and International Politics**  
This field contains courses dealing with the comparative study of politics around the world and during different historical periods.

**Law**  
This field provides a strong foundation in the law, law’s relation to the state and to society, the judicial process and legal reasoning.

**Political Theory**  
This field addresses fundamental concepts and issues that underlie the study of political life, both in the historical tradition and with regard to specific topics.

**Courses**

**PLSC 1000 Introduction to American Politics (4 Credits)**  
Philosophical traditions, historical background, structure and functioning of American government, and political attitudes and behavior. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**PLSC 1110 Comparing Politics around the World (4 Credits)**  
This course introduces the basic concepts of comparative politics, emphasizing both history and theory, and it designed to give students the intellectual tools necessary to understand the forces that shape governance in countries at varied stages of political and economic development. The course’s key questions include: are countries becoming more democratic, and will all states follow something akin to the model of the United States? Or are differences between countries becoming even more apparent, with old ethnic rivalries, styles of governance, and religious movements having an impact on the divergent evolution of regimes? The class compares politics primarily in four countries: the United Kingdom, Japan, China, and Nigeria. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**PLSC 1610 Introduction to Political Thought: Power, Liberty, and Justice (4 Credits)**  
This course presents an introduction to some of the key ideas and questions in the study of politics. As an introductory course, it cannot present a systematic overview of the entire study of politics; rather, it seeks to introduce students to some central concerns in the study of politics. In this course we learn about the basic principles of human conduct in social contexts and explain how social scientific methods are used to understand these underlying principles. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**PLSC 1810 Introduction to Law and Society (4 Credits)**  
This course introduces the relationship between law and society, exploring principles of legal conduct in social contexts and explaining how social scientific methods are used to understand these principles. Questions discussed include what is the relationship between the “law-on-the-books” and “law-in-action,” and what can we learn from gaps between formal law and the “real” law that is experienced in society? Empirical examples may include international comparisons and the evolution of law over time. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**PLSC 2001 Law and Politics (4 Credits)**  
Introduces the relationship between law and politics, describing the basic principles of legal conduct in political contexts and explaining how social scientific methods are used to understand these underlying principles. Questions explored include the following: Where does the law come from? Whose interests does it reflect? Does formal legal change lead to practical political and social change? Why do we comply with the law? What are the limits of enforcement? This course counts toward the Scientific Inquiry: Society and Culture requirement. Prerequisite: sophomore standing.

**PLSC 2005 Voices of Self, Soul, & Public (4 Credits)**  
This course examines the place of the individual in relationship to public life, systems of knowledge, and the natural world. It asks basic questions such as, Who am I? What is my place in the world? What is free will? What is the place of spirituality and contemplation in a secular society? Drawing from the humanities, natural sciences and social sciences, the course provides foundational material for responding to these questions. The methodology of the course is first-person experiential inquiry involving sustained periods of contemplation and meditation.

**PLSC 2050 Anarchy or Order? World Politics (4 Credits)**  
World politics is characterized by the absence of any overarching governmental authority; the "sovereignty" of individual states creates an international anarchy. This anarchy creates a permissive environment that influences how states and other global actors relate to each other. This course introduces the evolution of the modern international system and provides an overview of the major concepts and theoretical approaches used in the study of world politics. The principle aim of the course is to provide an analytical framework to understand and evaluate international events and issues. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**PLSC 2200 Politics of China (4 Credits)**  
This course brings the contested notion of democratization into the East Asian context and tests its relevance for countries at various stages of political and economic development in the region. After introducing the general debates over what democratization is and tracing its emergence in Western Europe and North America, this class explores the rise of democratization movements in East Asia and examines the various forms of democratization in different political and economic settings.
PLSC 2215 East Asia in World Politics (4 Credits)
This class focuses on East Asia and tests how accurately major international relations theories describe what is going on in this part of the world. The region is home to two of the world's most influential players, namely China and Japan. South Korea, another key player in the region, is another global economic powerhouse. East Asia also has two potentially explosive issues, namely the Korean Peninsula and the Chinese sovereign claim over Taiwan. We discuss what the region's economic might and security importance mean to the rest of the world and America, in particular. Prerequisite: sophomore standing.

PLSC 2220 Comparative Democratization: East and West (4 Credits)
This course brings the contested notion of democratization into the East Asian context and tests its relevance for countries at various stages of political and economic development in the region. After introducing the general debates over what democratization is and tracing its emergence in Western Europe and North America, class explores the rise of democratization movements in East Asia and examines the various forms of democratization in different political and economic settings.

PLSC 2225 European Political Economy (4 Credits)
Examines major challenges facing European political economies from the postwar era, including transformations in the welfare state, liberalization in light of market transitions and European integration, and global pressures. Prerequisite: sophomore standing.

PLSC 2240 Political Economy: The Welfare State (4 Credits)
Explores the range of policies and programs associated with the contemporary welfare state in the U.S. and other postindustrial democracies, comparing the differentiated and private emphasis of the U.S. welfare state in contrast to more universal and public welfare states in Europe. Questions the class considers include the following: Are contemporary social programs sustainable? Who benefits the most from particular policies and how does this affect the political costs associated with reform? How effectively do welfare states reduce poverty and equalize opportunities for advancement? What justifies the redistribution of wealth inherent in the welfare state? Prerequisite: sophomore standing.

PLSC 2260 Politics of Japan (4 Credits)
How did Japan rapidly catch up with more advanced industrial powers? Can other developing countries copy the Japanese model? What was the "darker side" behind Japan's economic miracle? How do we come to terms with the sudden burst of Japan's "Bubble Economy?" Will Japan's current economic recovery process, which started in 2002, be sustainable? Is a genuine international reconciliation between Japan and its neighbors possible? These are just some of the questions we will examine in this class. Prerequisite: sophomore standing. Cross listed with ASIA 2601.

PLSC 2280 Comparative Social Movements (4 Credits)
Types of social/political issues and forms of interest intermediation represented by new social movements in Western industrial society. Prerequisite: sophomore standing.

PLSC 2300 Public Policy (4 Credits)
This course explores the politics associated with the process of making and implementing public policy in the United States. Substantive topics vary with instructor. Sophomore standing required.

PLSC 2360 Comparative Race Politics: State Power and Indigenous Rights (4 Credits)
This course explores historical and contemporary aspects of racialized power structures as they have specifically impacted indigenous peoples in different countries. How did the dynamics of imperialism, capitalism, liberal state-building, and racialist (and racist) ideology combine to devastate indigenous communities around the world? How did distinct perspectives on time, space, property, and community allow colonizing populations to conquer native populations even while advocating the most egalitarian political structures ever attempted? Sophomore standing required.

PLSC 2370 Global Political Economy (4 Credits)
Global Political Economy (GPE) examines the interplay between politics and economics within and across nation-states in response to international politics and economics. The course explores the effect of political factors on international economic relations and the impact of international economic factors on domestic and international politics. The objective is to evaluate various theories of the global political economy through observation of the global political-economic system. Because you will be doing quantitative, statistical analysis and research, you will be required to acquire some basic statistical knowledge.

PLSC 2400 Political Behavior: Attitude and Public Opinion (4 Credits)
This course focuses on a core feature of democratic government: the mass public. It examines how political attitudes are formed and measured, how these broad public preferences are communicated to government, and what impact public opinion has on policy development. Sophomore standing required.

PLSC 2410 American Government Simulation (4 Credits)
This course explores American politics by simulating the legislative process of the federal government. Students play either a member of the House of Representatives or a member of the Executive Branch. The simulation requires that students seek the goals related to their position. By putting theory into practice, students gain a better understanding of Washington politics. Prerequisite: PLSC 1000 or equivalent.

PLSC 2415 Campaigns and Elections (4 Credits)
The U.S. holds hundreds of elections every year, but presidential elections stand alone as the only truly national contests. What influences presidential selection? What information can we gain as citizens and scholars from national presidential debates? These elections are guided by distinct rules (including nominations via primaries and caucuses, evolving campaign finance laws, and the strict requirements of the Electoral College) with ever-changing strategies to maximize support under these rules. This class provides students with the historic context and political science concepts and theories to better understand the many steps involved in electing U.S. presidents. This course counts toward the Scientific Inquiry: Society and Culture requirement.
PLSC 2420 American Presidency (4 Credits)
Historical development and current role and powers of the U.S. presidency. Prerequisite: sophomore standing.

PLSC 2425 Religion in American Politics (4 Credits)
This course offers a broad, critical overview of the relationship, and some of the tensions, between religion and politics in the United States. We first review how the historical presence of a variety of American religious groups and perspectives on the relationship between church and state have impacted the nation’s often conflicted sense of identity as well as the tenor of our ongoing debates about - and within - religion in American politics. That gives us a foundation for exploring a number of current “hot button” issues like debates over “moral values” and faith-based initiatives. Prerequisite: sophomore standing.

PLSC 2430 Political Parties & Interest Groups (4 Credits)
Evolution and structure of political parties; how they mobilize voters and provide leadership of political issues. Prerequisite: sophomore standing.

PLSC 2450 Rise of Political Individualism (4 Credits)
Political experience and reflection from 1450 to 1800; medieval background; Machiavelli and Renaissance; Reformation; Anglican and Puritan thought; Hobbes; Locke; Enlightenment; Rousseau. Prerequisite: sophomore standing.

PLSC 2460 Re-Inventing Europe (4 Credits)
Politics, economics and culture of Europe of today including basics of parliamentary democracy, contemporary political economy and national identities of major European countries as well as developments in the European Union and Eastern Europe. Prerequisite: sophomore standing.

PLSC 2470 State and Local Politics (4 Credits)
This course examines the general and the unique traits of the politics, institutions, and policy processes of state governments. We will, in addition, take advantage of our location and focus on the government and politics of Colorado.

PLSC 2480 U.S. Congress (4 Credits)
Structure and functions of U.S. Congress and congressional behavior. Prerequisite: sophomore standing.

PLSC 2490 Political Psychology (4 Credits)
This course examines the intersection of politics and psychology. Students will examine how emotion, cognition, and group psychology influence political actors and policy outcomes. Students will apply these concepts to voting, foreign policy decision-making, and the formation of belief systems.

PLSC 2500 Political Psychology (4 Credits)
Historical development and current role and powers of the U.S. presidency. Prerequisite: sophomore standing.

PLSC 2510 American Political Thought (4 Credits)
Where do distinctly “American” values and beliefs come from and why are they so fiercely held? Are there viable alternatives to the classic ways in which Americans tend to address our social and political problems? This course offers an exploration of these questions through the historical canon of American political thought, with an eye to the competing strains of Jeffersonian and Hamiltonian philosophy that have influenced American thought for centuries. Starting before the Founding and continuing to political thinkers of the present day, this seminar-style course will examine the broad strains of liberalism, radicalism, and conservatism—and the unique ways they intersect—in American political speech and theory.

PLSC 2520 Quest for Community (4 Credits)
Evolution and structure of political parties; how they mobilize voters and provide leadership of political issues. Prerequisite: sophomore standing.
PLSC 2703 Topics in Political Science (1-4 Credits)
Nonseminar format focusing on specific issues in political science. Depending on content, PLSC 2703 may be counted toward concentrations.
Prerequisite: sophomore standing.

PLSC 2704 Topics in Political Science (4 Credits)
Nonseminar format focusing on specific issues in political science. Depending on content, PLSC 2704 may be counted toward concentrations.
Prerequisite: sophomore standing.

PLSC 2708 American Political & Foreign Policy (4 Credits)
Contemporary American foreign policy; its formulation and implementation. Prerequisite: sophomore standing.

PLSC 2815 Comparative Courts (4 Credits)
Who goes to courts, and what do courts achieve? This course examines the role of courts in a variety of legal traditions, comparing how constitutional, civil, and criminal disputes relate to political conflict and change in contemporary democracies. We then explore the role of courts in regime changes, including both the demise of democracy and transitions to democracy after experiences of colonialism, authoritarianism, fascism, and communism. Finally, we consider how international tribunals are transforming the nature of sovereignty. Prerequisite: sophomore standing.

PLSC 2820 Civil Rights and Liberties (4 Credits)
Civil rights have emerged as central to contests over governance. How have civil rights laws and movements emerged, particularly in the United States? This course addresses both how courts address questions and social movements around rights. Substantive areas include freedom of speech and religion, the prohibition on establishing a religion in the United States, and claims to equality.

PLSC 2830 Law and Social Policy (4 Credits)
Examines how law and courts shape and reflect social policy, exploring policy formulation and implementation across a range of social issues such as gender, poverty, welfare, economic justice, and social control. Sophomore standing required.

PLSC 2840 International Law & Human Rights (4 Credits)
Legal and philosophical status of human rights worldwide; socioeconomic barriers to achieving global human rights. Prerequisite: sophomore standing.

PLSC 2860 Constitutional Law & Politics (4 Credits)
What are the fundamentals of constitutional governance? How have they been debated? How have institutions of the state understood constitutional requirements? Focus is on the United States, but not exclusively. Topics include judicial review; federalism; racial, sexual, political and economic equality; rights of the accused. Prerequisite: sophomore standing.

PLSC 2880 Taming Tyranny: How Constitutions Frame Freedom (4 Credits)
Comparative analysis of legal systems including constitution making, distribution of governmental powers, nature of individual rights and analysis of specific substantive areas such as abortion rights. Prerequisite: sophomore standing.

PLSC 2901 Political Inquiry (4 Credits)
Introduces political inquiry within the discipline of political science, examining quantitative, qualitative, and historical research methods with a focus on basic principles of effective research design and data analysis; no previous mathematical background is necessary. By the end of the course, students are able to evaluate scientific research, frame a research question, and design a research study. Prerequisite: sophomore standing.

PLSC 2992 Directed Study (1-10 Credits)

PLSC 3290 Capstone Seminar in Politics (4 Credits)
This capstone seminar is required for all majors and explores theoretical and empirical issues of politics with application to specific political developments. Topics vary by section and instructor. All students complete a significant independent research paper based in part on analysis of primary source materials. Senior standing required. Political Science majors only.

PLSC 3701 Topics in Political Science (1-4 Credits)

PLSC 3702 Topics in Political Science (1-4 Credits)

PLSC 3703 Topics in Political Science (1-4 Credits)

PLSC 3704 Topics in Political Science (1-4 Credits)

PLSC 3982 Political Internship (1-4 Credits)
Students may work in campaigns and elections, neighborhood associations, the state legislature, or for members of Congress, to name recent placements. Students will keep journals structured by questions from a faculty member, meet in a seminar with others doing an internship to reflect on service in their placement, and write a research paper integrating their experience with relevant scholarship.

PLSC 3985 Legal Internship (1-4 Credits)
Students may work in the local courts, advocacy organizations, the public defender’s office, and the district attorney’s office, to name examples of the most common sites. Students will keep journals structured by questions from a faculty member, meet in a seminar with others doing an internship to reflect on service in their placement, and write a research paper integrating their experience with relevant scholarship.

PLSC 3990 Honors Thesis (2-8 Credits)
Independent work on honors thesis. Prerequisite: senior standing.

PLSC 3991 Independent Study (1-4 Credits)
Independent scholarship on a theoretical or empirical project. Prerequisite: faculty approval.
Department of Psychology

Office: Frontier Hall  
Mail Code: 2155 S. Race Street, Denver CO 80208  
Phone: 303-871-2478  
Web Site: www.du.edu/ahss/psychology

The quest to understand human behavior is the heart of psychology. Through application of scientific principles, the psychologist searches for laws that explain human behavior and looks for ways to help people improve the quality of their lives.

Within the psychology department, students can work toward either a BA or BS and can focus study in a number of different content areas, including clinical, developmental, cognitive/neuroscience, social or quantitative psychology.

Faculty members are nationally recognized scholars and researchers as well as dedicated instructors. The department has excellent research and computing facilities and undergraduate students are encouraged to participate actively in research with their professors. Many students have coauthored one or more papers or publications with faculty members. The department also has an outstanding two-year distinction sequence, beginning in the junior year with an introduction to basic research principles and culminating in the senior year with the completion of a senior honors research project. A one-year internship experience is also available in a community hospital or agency for students with clinical interests.

While many psychology students pursue advanced degrees, interesting positions in related fields are also available for students with a BA or BS. These include positions as counselors, educators, parole officers, welfare officers and childcare and advocacy workers. A major in psychology can also provide strong preparation for careers in fields such as business, law and medicine. Students with an interest in brain function may want to consider the concentration in cognitive neuroscience, a joint major involving psychology and biological sciences. Please see the cognitive neuroscience section of this bulletin for more information.

Psychology

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

40 credits of psychology, with 25 credits at the 2000 or 3000 level. Requirements include:

- PSYC 1001 Foundations of Psychological Science 4
- PSYC 2300 Introduction to Statistics 4

Research Methods

Select one of the following: 4
- PSYC 3050 Research Methods
- PSYC 2751 & PSYC 2752 Junior Honors Research Seminar

Content Courses

Complete one 2000-level course meeting three of the following four content areas: 1 12

Clinical:
- PSYC 2500 Abnormal Psychology

Cognition and Neuroscience:
- PSYC 2031 Introduction to Cognitive Neuroscience

Developmental:
- PSYC 2070 Child and Lifespan Development

Social:
- PSYC 2740 Social Psychology

Electives

Complete additional psychology courses to meet the 40 credit minimum; these can include extra courses from above. 16
- PSYC 3999 Psychology Senior Assessment (to be completed during the year the student intends to graduate) 0

Total Credits 40

Students must earn one minor or a second major. Note that only 60 credits of PSYC can count toward the total University credits necessary for the BA degree, with the exception that courses in the distinction sequence (PSYC 2751 Junior Honors Research Seminar, PSYC 2752 Junior Honors Research
Seminar, PSYC 3150 Senior Honors Research Seminar, PSYC 3151 Senior Honors Research Seminar, PSYC 3152 Senior Honors Research Seminar) do not count against the 60 credit maximum.

Students interested in Distinction in the Major should consult with an advisor or the instructor for the Junior Honors sequence for additional information.

1 Students may have additional options, contact advisor.

Secondary Major Requirements

40 credits. Same requirements as for BA degree.

Bachelor of Science Major Requirements

(183 credits required for the degree) (p. 40)

45 credits of psychology, with 25 credits at the 2000 or 3000 level. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>Foundations of Psychological Science</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2300</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 3050</td>
<td>Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2751</td>
<td>Junior Honors Research Seminar</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PSYC 2752</td>
<td>Junior Honors Research Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Content Courses

Complete one 2000-level course from each of the following four content areas: 1

Clinical:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2500</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

Cognition and Neuroscience:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2031</td>
<td>Introduction to Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

Developmental:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2070</td>
<td>Child and Lifespan Development</td>
</tr>
</tbody>
</table>

Social:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2740</td>
<td>Social Psychology</td>
</tr>
</tbody>
</table>

Electives

Complete additional psychology courses to meet the 45 credit minimum; these can include extra courses from above. 17

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3999</td>
<td>Psychology Senior Assessment</td>
</tr>
</tbody>
</table>

Total Credits 45

Students must have either two minors or a second major with a minor, with at least one of these two being a natural or computer science or mathematics (i.e., biological sciences, chemistry, computer science, environmental science, geography, mathematics, or physics). Students interested in the Distinction in the Major should consult with an advisor or the instructor for the Junior Honors sequence for additional information.

1 Students may have additional options, contact advisor.

Minor Requirements

20 credits of psychology, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>Foundations of Psychological Science</td>
<td>4</td>
</tr>
</tbody>
</table>

Content Courses

Complete two 2000-level courses to fill the following four content areas: 1

Clinical:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2500</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

Cognition and Neuroscience:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2031</td>
<td>Introduction to Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

Developmental:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2070</td>
<td>Child and Lifespan Development</td>
</tr>
</tbody>
</table>

Social:
Electives
Complete additional psychology courses to meet the 20 credit minimum; these can include extra courses from above. 8

Total Credits 20

1 Students may have additional options, contact advisor.

Cognitive Neuroscience

Requirements for Psychology with Cognitive Neuroscience Concentration: Bachelor of Arts

(183 credits required for the degree) (p. 38)

40 credits of psychology, with 25 credits at the 2000 or 3000 level. Requirements include:

PSYC 1001 Foundations of Psychological Science 4
PSYC 2300 Introduction to Statistics 4

Research Methods
Select one of the following: 4

- PSYC 3050 Research Methods
- PSYC 2751 Junior Honors Research Seminar
- PSYC 2752 and Junior Honors Research Seminar

Content Courses
Complete one 2000-level course from each of the following four content areas: 1 16

Clinical:
- PSYC 2500 Abnormal Psychology

Cognition and Neuroscience:
- PSYC 2031 Introduction to Cognitive Neuroscience

Developmental:
- PSYC 2070 Child and Lifespan Development

Social:
- PSYC 2740 Social Psychology

Cognitive Neuroscience Electives
Complete one course listed below or that lists PSYC 2031 as prerequisite. 4

- PSYC 3032 Introduction to Neural Networks
- PSYC 3080 Drugs and Behavior
- PSYC 3155 Motivation and Emotion
- PSYC 3262 Affective Neuroscience
- PSYC 3666 Brain Development & Cognition

Additional Required Courses
PSYC 3035 Seminar: Cognitive Neuroscience 2
PSYC 3999 Psychology Senior Assessment (to be completed during the year the student intends to graduate) 0

Psychology Electives
Complete additional psychology courses to meet the 40 credit minimum; these can include extra courses from above. 6

Total Credits 40

Students must also have a major or minor in Biological Sciences. Note that only 60 credits of PSYC can count toward the total University credits necessary for the BA degree, with the exception that courses in the distinction sequence (PSYC 2751 Junior Honors Research Seminar, PSYC 2752 Junior Honors Research Seminar, PSYC 3150 Senior Honors Research Seminar, PSYC 3151 Senior Honors Research Seminar, PSYC 3152 Senior Honors Research Seminar) do not count against the 60 credit maximum.

Students interested in Distinction in the Major should consult with an advisor or the instructor for the Junior Honors sequence for additional information.

1 Students may have additional options, contact advisor.
Requirements for Psychology with Cognitive Neuroscience Concentration: Bachelor of Science

(183 credits required for the degree) (p. 40)

45 credits of psychology, with 25 credits at the 2000–3000 level. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>Foundations of Psychological Science</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2300</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Research Methods

Select one of the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3050</td>
<td>Research Methods</td>
</tr>
<tr>
<td>PSYC 2751 &amp; 2752</td>
<td>Junior Honors Research Seminar</td>
</tr>
</tbody>
</table>

Content Courses

Complete one 2000-level course from each of the following four content areas: 1 16

Clinical:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2500</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

Cognition and Neuroscience:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2031</td>
<td>Introduction to Cognitive Neuroscience</td>
</tr>
</tbody>
</table>

Developmental:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2070</td>
<td>Child and Lifespan Development</td>
</tr>
</tbody>
</table>

Social:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2740</td>
<td>Social Psychology</td>
</tr>
</tbody>
</table>

Cognitive Neuroscience Electives

Select one course listed below or that lists PSYC 2031 as prerequisite. 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3032</td>
<td>Introduction to Neural Networks</td>
</tr>
<tr>
<td>PSYC 3080</td>
<td>Drugs and Behavior</td>
</tr>
<tr>
<td>PSYC 3155</td>
<td>Motivation and Emotion</td>
</tr>
<tr>
<td>PSYC 3262</td>
<td>Affective Neuroscience</td>
</tr>
<tr>
<td>PSYC 3666</td>
<td>Brain Development &amp; Cognition</td>
</tr>
</tbody>
</table>

Additional Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3035</td>
<td>Seminar: Cognitive Neuroscience</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 3999</td>
<td>Psychology Senior Assessment</td>
<td>0</td>
</tr>
</tbody>
</table>

Psychology Electives

Complete additional psychology courses to meet the 45 credit minimum; these can include extra courses from above. 11

Total Credits 45

Students must have either two minors or a second major with a minor, one of which must be in biological sciences. Students interested in the Distinction in the Major should consult with an advisor or the instructor for the Junior Honors sequence for additional information.

1 Students may have additional options, contact advisor.

Psychology Minor Requirements

Concentration requirements for psychology majors are listed above. Please see the Department of Biological Sciences (p. 93) for biological sciences minor requirements associated with this concentration.

Minor Requirements:

Students must have a major in biological sciences or molecular biology with the cognitive neuroscience concentration. 20 credits, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1001</td>
<td>Foundations of Psychological Science</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2031 or 2040</td>
<td>Introduction to Cognitive Neuroscience</td>
<td>4</td>
</tr>
</tbody>
</table>

Content Course

Complete one of the following courses: 1 4
### Clinical:
- PSYC 2500 Abnormal Psychology

### Developmental:
- PSYC 2070 Child and Lifespan Development

### Social:
- PSYC 2740 Social Psychology

#### Cognitive Neuroscience Electives
Select one course listed below or that lists PSYC 2031 as prerequisite.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3032</td>
<td>Introduction to Neural Networks</td>
</tr>
<tr>
<td>PSYC 3080</td>
<td>Drugs and Behavior</td>
</tr>
<tr>
<td>PSYC 3155</td>
<td>Motivation and Emotion</td>
</tr>
<tr>
<td>PSYC 3262</td>
<td>Affective Neuroscience</td>
</tr>
<tr>
<td>PSYC 3666</td>
<td>Brain Development &amp; Cognition</td>
</tr>
</tbody>
</table>

#### Additional Required Course
- PSYC 3035 Seminar: Cognitive Neuroscience

#### Psychology Electives
Complete additional psychology courses to meet the 20 credit minimum; these can include extra courses from above.

### Total Credits
20

1. Students may have additional options, contact advisor.

## Courses

### PSYC 1001 Foundations of Psychological Science (4 Credits)
This course is an introduction to the scientific study of mind and behavior. It includes topics such as the biological basis of behavior, the developmental transitions from infancy through old age, the principles underlying perception, learning and memory, and the ways in which behavior is affected by its physical, social, and cultural context. This course counts toward the Scientific Inquiry: Society and Culture requirement.

### PSYC 1700 Topics in Psychology (4 Credits)
PSYC 1701 Topics in Psychology (4 Credits)
PSYC 1702 Topics in Psychology (4 Credits)
PSYC 1703 Topics in Psychology (4 Credits)
PSYC 1704 Topics in Psychology (4 Credits)
PSYC 1992 Directed Study (1-10 Credits)

### PSYC 2031 Introduction to Cognitive Neuroscience (4 Credits)
The goal of this course is to examine the relations between brain and behavior to better understand how complex behavior is mediated by the brain. Prerequisite: PSYC 1001.

### PSYC 2040 Cognition and Learning (4 Credits)
Overview of behavioristic and cognitive science approaches to learning process; includes conditioning and human information processing. Prerequisite: PSYC 1001.

### PSYC 2070 Child and Lifespan Development (4 Credits)
This course explores physical, cognitive, social and emotional development across the lifespan, from the prenatal period through death. Prerequisite: PSYC 1001.

### PSYC 2090 Human Sexuality (4 Credits)
Physiological, behavioral and social aspects of human behavior. Prerequisite: PSYC 1001.

### PSYC 2109 Depression (4 Credits)
Phenomenology of depression, as expressed in literature and as experienced ourselves; demographics of sufferers; psychological theories that attempt to explain its etiology and guide its treatment. Prerequisite: PSYC 1001.

### PSYC 2112 Research Apprenticeship (1-5 Credits)
Through this course, students receive course credit for an internship in which they work as a research assistance. Permission of instructor required.

### PSYC 2300 Introduction to Statistics (4 Credits)
Elementary statistical methods in psychology and education. Required for all students, but especially important for students planning graduate work in psychology. Recommended: knowledge of basic algebra. Prerequisite: PSYC 1001.

### PSYC 2500 Abnormal Psychology (4 Credits)
PSYC 2510 Personality (4 Credits)
Structure and development of human personality, primary emphasis on psychodynamic conceptual formulations. Prerequisite: PSYC 1001.

PSYC 2520 Introduction to Clinical Psychology (4 Credits)
Eclectic survey of clinical roles, theory and research; function and dilemmas of clinical psychologists. Prerequisite: PSYC 1001.

PSYC 2530 Child Psychopathology (4 Credits)
Child Psychopathology surveys the latest theory and research in the field of developmental psychopathology, which is the study of abnormal behavior from a developmental perspective. Students learn about what the emotional and behavioral disorders of childhood and adolescence are, what causes them, and how they are treated. Additionally, the course covers how we judge what is considered to be abnormal or atypical behavior, and how we acquire knowledge about developmental psychopathology. Prerequisite: PSYC 1001.

PSYC 2540 The Psychology of Couples Relationships: From Dating to Mating and Beyond (4 Credits)
The primary complaints of couples in therapy include: "We can't communicate." "We fight too much." "We have grown apart and have no sex." "He/she cheats on me and /or is aggressive." We cover research on these issues, as well as how to help couples select great mates and have a lifetime loving healthy relationship. Throughout the course we cover overarching themes including the influence of popular culture (listening to music, watching movie clips) diversity in relationships (e.g., Same-sex Marriage). Prerequisite: PSYC 1001.

PSYC 2700 Topics in Psychology (1-4 Credits)
Prerequisite: PSYC 1001.

PSYC 2701 Topics in Psychology (1-4 Credits)
Prerequisite: PSYC 1001.

PSYC 2702 Topics in Psychology (1-4 Credits)
Prerequisite: PSYC 1001.

PSYC 2703 Topics in Psychology (1-4 Credits)
Prerequisite: PSYC 1001.

PSYC 2704 Topics in Psychology (1-4 Credits)
Prerequisite: PSYC 1001.

PSYC 2710 Gender Development: Biological, Cognitive and Social Perspectives (2 Credits)
This course is designed to provide a stimulating environment in which all students participate actively to analyze critically and discuss research on gender development. The course focuses on empirically supported biological, cognitive and social perspectives on gender development. It is also designed to assist students to develop critical analysis skills, which are necessary for both producing and consuming research.

PSYC 2740 Social Psychology (4 Credits)
Concepts, data and principles regarding social influences on human behavior. Prerequisite: PSYC 1001.

PSYC 2751 Junior Honors Research Seminar (1-4 Credits)
First course in a two-year sequence. Research, design and methodology to facilitate a senior research thesis. Prerequisites: PSYC 1001 and acceptance to psychology distinction program.

PSYC 2752 Junior Honors Research Seminar (1-4 Credits)
Second course in a two-year sequence. Research, design and methodology to facilitate a senior research thesis. Prerequisites: PSYC 1001 and acceptance to psychology distinction program.

PSYC 2760 Field Experiences in Learning & Applied Behavior Analysis (4 Credits)
Introduction to the application of learning principles and applied behavior analysis. Students obtain first-hand experiences working in a community setting. Prerequisite: PSYC 1001.

PSYC 2992 Directed Study (1-10 Credits)

PSYC 3020 Adolescence (4 Credits)
Development, behavior, special problems, and characteristics of early and late adolescence. Prerequisite: PSYC 1001 and PSYC 2050, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3029 Imaging the Mind (4 Credits)
Imaging Cognition is an introductory course to the basic theory and data analysis techniques used in functional magnetic resonance imaging (fMRI). It will cover basic brain anatomy, the basic physics of MRI, experimental design, data processing and the issues associated with data processing, and interpretation of fMRI data. Students in this course will receive hands-on experience in processing a data set from start to finish. They will apply different image preprocessing techniques, statistical design parameters, and statistical models to determine how these factors influence the outcome of the data and how these factors influence the interpretation of that data. In this manner, each student will be exposed individually to the decision issues and interpretation pitfalls involved in fMRI data analysis. In class, students will use the smart-to- the-seat classroom. Cross listed with PSYC 4255. Prerequisites: PSYC 1001 and PSYC 2031, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3032 Introduction to Neural Networks (4 Credits)
Introduction to basic principles and computational methods in artificial neural network modeling; neural models of cognitive and psychological processes examined and evaluated. Cross listed with PSYC 4254. Prerequisite: PSYC 1001, must be a major or minor in psychology, must have at least sophomore standing.
PSYC 3035 Seminar: Cognitive Neuroscience (2 Credits)
This seminar is for students in the cognitive neuroscience program. The goal of the seminar is to provide an opportunity for junior- and senior-level cognitive neuroscience majors to apply the knowledge and skills they have acquired in other courses to current cutting-edge topics in the field. Prerequisite: cognitive neuroscience concentration.

PSYC 3050 Research Methods (4 Credits)
Survey of research methods and research designs in psychology used to study behavior. Required for all students, especially those planning graduate work in psychology. Prerequisites: PSYC 1001, PSYC 2300, and INFO 1020.

PSYC 3060 Eating Disorders (4 Credits)
Overview of etiology, clinical presentation, prevention and treatment of eating disorders. Prerequisites: PSYC 1001 and PSYC 2500, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3080 Drugs and Behavior (4 Credits)
Nature of licit and illicit drugs; their short- and long-term biological and psychological effects. Prerequisites: PSYC 1001 and PSYC 2031, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3090 Infancy and Early Childhood (4 Credits)
The objective of this course is to introduce the study of early development focusing on the prenatal and infant periods. This course considers the exciting changes that take place during pregnancy for both mom and fetus. This course considers biological, cognitive, social, and physical development. This course is part of the field of Developmental Science. The prominent theories and research in the field are considered. Questions developmental psychologists currently and historically study and the research they conduct to help answer these questions are explored. Prerequisite: PSYC 1001 and PSYC 2070 or PSYC 2050 or PSYC 2051. Must be either a major or minor in psychology. Must have at least sophomore standing.

PSYC 3109 Depression (4 Credits)
This course extends knowledge acquired in PSYC 1001 and in PSYC 2500 to the in-depth study of mood disorders (unipolar and bipolar depression) across the lifespan. It covers in depth various topics, including description and classification of mood disorders, the various causes of these emotional disturbances (e.g., psychosocial, biological, genetic), and treatments of these disorders across the lifespan. Prerequisites: PSYC 1001 and PSYC 2500, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3112 Advanced Research Apprenticeship (1-5 Credits)
This course provides an opportunity for students who have already completed 10 hours of PSYC 2112 research apprenticeship to gain advanced experience in a current research laboratory in psychology. Prerequisites: 10 hours of PSYC 2112, 40 credit hours in psychology, and permission of instructor.

PSYC 3120 The Science of Love (4 Credits)
This course explores the theory, research and issues relevant to love in parent-child and romantic relationships. Prerequisites: a minimum of 12 credit hours in psychology courses and Junior or Senior standing.

PSYC 3130 Couples Therapy and Relationship Education: Current Status and Future Directions (4 Credits)
There are two major approaches to helping couples achieve happy and healthy relationships over time: Couples Therapy and Couples Relationship Education. Whereas therapy helps distressed couples improve an unhappy relationship, relationship education serves as a preventative intervention designed to help happy couples protect and preserve their happiness. This course covers the major research-based approaches to couples therapy, including Cognitive-Behavioral Therapy, Integrative-Behavioral Couples Therapy and Emotional-Focused Couples Therapy. In addition, the class covers the major research-based approaches to couples relationship education, including PREP, CouplesCare, and Relationship Education. The class also focuses on both common and distinctive challenges that couples face, including: long-distance relationships, having a child, overseas deployments for military couples, psychological issues, substance abuse, medical issues, infidelity, aggression, dealing with social media and aging. Finally, the class covers issues related to diversity, including same-sex couples, interracial couples and couples from other countries and cultures. Prerequisites: PSYC 1001, PSYC 2300, PSYC 2740, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3150 Senior Honors Research Seminar (1-5 Credits)
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

PSYC 3151 Senior Honors Research Seminar (1-5 Credits)
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

PSYC 3152 Senior Honors Research Seminar (1-5 Credits)
In conjunction with senior research thesis. Prerequisites: PSYC 2750, PSYC 2751 and PSYC 2752.

PSYC 3155 Motivation and Emotion (4 Credits)
Social and biological approaches to study of motivation and emotion in humans and lower animals. Prerequisites: PSYC 1001 and PSYC 2031. Must be either a major or minor in psychology. Must at least have sophomore standing.

PSYC 3160 Emotion Regulation (4 Credits)
This course covers the current state of psychological and neuroscience research on how we’re able to control our emotions (emotion regulation). This topic includes studies of different types of emotion regulation strategies, such as cognitive reappraisal and expressive suppression, stress and coping, as well as self-regulation more broadly. This is a service learning course; students are required to give presentations to the class and to community members. Prerequisites: PSYC 1001 and PSYC 2031, must be either a major or minor in psychology, must have at least sophomore standing.
PSYC 3262 Affective Neuroscience (4 Credits)
Affective neuroscience is the study of emotions in the brain. In this course, we explore how new frontiers in emotion research, from brain scans to psychoactive drugs to monkey colonies, have changed the way we think about emotions and moods. We aim to learn how scientists ask these new questions: How and what can we learn about emotion from animal models, patient studies, genetic studies, brain scans, and drugs? We learn and debate different theories about what emotions are: When are emotions helpful and harmful? Why do we have them? How many are there? Can we control how we feel? Finally, we learn how to think about emotions scientifically: What kind of evidence matters? How do emotion scholars talk about their work? What kind of questions can we ask, and what kind can we hope to answer? Cross listed with PSYC 4262. Prerequisites: PSYC 1001, PSYC 2031, must be either a major or minor in psychology, must have at least sophomore standing.

PSYC 3350 Cultural Psychology (4 Credits)
This seminar examines how people's sociocultural context shapes their thoughts, feelings, and behaviors. To approach this question, we read and discuss classic as well as more recent theoretical and empirical articles from the field of cultural psychology. Topics include defining culture; dimensions of cultural variation; culture-biology interactions; methodological considerations; cultural influences on cognition, emotion, the self, moral judgment, and health; cultural neuroscience; cultural approaches to race and ethnicity; and mechanisms of cultural influence. Throughout, this course emphasizes sociocultural diversity in psychological processes. Students are encouraged to develop empirically tractable ways of asking and answering questions relating to cultural psychology and to apply concepts of cultural psychology to their own research. Prerequisite: PSYC 1001, must be either a major or minor in psychology, must at least have sophomore standing.

PSYC 3440 Gender and Society (4 Credits)
Prerequisites: PSYC 1001, must be a psychology major or minor, must have at least sophomore standing.

PSYC 3520 Introduction to Clinical Psychology (4 Credits)
Overview of clinical roles theory and research; function and dilemmas of clinical psychologists. Prerequisites: PSYC 1001 and PSYC 2500.

PSYC 3530 Child Psychopathology (4 Credits)
Child Psychopathology surveys the latest theory and research in the field of developmental psychopathology, which is the study of abnormal behavior from a developmental perspective. Students learn about what the emotional and behavioral disorders of childhood and adolescence are, what causes them, and how they are treated. Additionally, the course covers how we judge what is considered to be abnormal or atypical, how we classify abnormal or atypical behavior, and how we acquire knowledge about developmental psychopathology. Prerequisites: PSYC 1001 and PSYC 2500, must be either a major or minor in psychology, must have at least sophomore standing.

PSYC 3610 Advanced Topics in Philosophy, Psychology, and Cognitive Science (4 Credits)
This course provides an advanced survey of conceptual and methodological issues that lie at the intersection of philosophy, psychology, and cognitive science. More specifically, our main goal is to engage in a critical discussion of how the study of the mind requires an interdisciplinary approach that integrates empirical findings with conceptual and philosophical theorizing. Cross listed with PHIL 3610. Prerequisites: PSYC 1001 and junior standing (or instructor approval).

PSYC 3660 Perception: A Cognitive Neuroscience Approach (4 Credits)
An introduction to human perception with a strong emphasis on visual perception. This course evaluates the current understanding of how neural activity in the brain allows people to perceive basic sensory features (e.g., brightness, color, size, position, depth, movement, loudness and pitch) as well as recognize and discriminate complex perceptual patterns (e.g., 2D-shapes, 3D-objects, faces, and scenes). The underlying mechanisms are discussed on the basis of behavioral, neurophysiological, and computational evidence. We attempt to understand how the brain creates what we see and hear. Prerequisites: PSYC 1001 and PSYC 2031, must be a major or minor in psychology, must have at least sophomore standing.

PSYC 3660 Brain Development & Cognition (4 Credits)
Examines what the brain tells us about development and what development tells us about the brain. Topics include subcortical and cortical developments to the acquisition of language and drawing. Prerequisites: PSYC 2050 or PSYC 3031 or BIOL 3640 and 15 quarter hours in psychology, junior or senior standing.

PSYC 3701 Topics in Psychology (1-4 Credits)

PSYC 3702 Psychology of Sexual Minorities (4 Credits)
This class is a thorough review of the state of the development, psychological and other social science knowledge of gay, lesbian, bisexual, transgendered, and other sexual minority individuals. The course will employ a developmental approach in examining the lives of GLBT persons, their special needs, concerns, and vulnerabilities. Topics explored will include the psychology of sexual orientation identity, homophobia, heterosexism, and hate crimes, GLBT adolescents, romantic relationships, couples, parenting, and families. Prerequisite: PSYC 1001.

PSYC 3759 Foundations for Field Experiences (2 Credits)
Students prepare for internships in the helping field by learning about various placement settings that provide services to client populations, learning basic therapeutic skills, and preparing to seek internships. Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, 21 years old by October 1, psychology major, and permission of instructor. Corequisite: PSYC 3760.

PSYC 3760 Field Experiences in Psychology (1-2 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, 21 years old by October 1, psychology major, and permission of instructor. Corequisite: PSYC 3759.
PSYC 3761 Field Experiences in Psychology (3-5 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. This class has a service learning component.
Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, PSYC 3760, PSYC 3759, 21 years old by October 1, psychology major, and permission of instructor.

PSYC 3762 Field Experiences in Psychology (1-5 Credits)
Students meet weekly with professor and complete an unpaid internship at a community organization. This class has a service learning component.
Prerequisites: PSYC 1001 or equivalent, PSYC 2500 or equivalent, PSYC 3760, PSYC 3759, PSYC 3761, 21 years old by October 1, psychology major, and permission of instructor.

PSYC 3800 Internships in Psychology (4 Credits)
Students complete an internship in the mental health or social work field while simultaneously completing assignments via our online classroom environment aimed at enhancing their understanding of 1) the application of psychological knowledge, b) professional development issues, and c) ethical and legal guidelines that impact social service providers. Must be a psychology major. Permission of instructor required and written confirmation from an internship site that indicates they will provide an unpaid internship slot for the student during the course duration. Prerequisites: PSYC 1001 or its equivalent, and PSYC 2500 or its equivalent.

PSYC 3991 Independent Study (1-10 Credits)
Maximum of 5 hours per quarter not to exceed a total of 10 quarter hours.

PSYC 3992 Directed Study (1-10 Credits)

PSYC 3999 Psychology Senior Assessment (0 Credits)
This course involves a required assessment of graduating psychology majors’ knowledge of the discipline based on coursework taken one quarter prior to graduation. Prerequisites: at least any five of the following courses required for the major: PSYC 1001 or equivalent, PSYC 2300, 3050 or 2751-2752, PSYC 2500 or 2510 or 2520 or 2530, PSYC 2600 or 2040 or 3030, PSYC 2050 or PSYC 2055; PSYC 2031 or 2130, PSYC 2031 or 2150 or at least 163 total credit hours or at least 30 credits of psychology hours.

Institute for Public Policy Studies
Office: Mary Reed Building, Room 107
Mail Code: 2199 S. University Blvd. Denver, CO 80208
Phone: 303-871-2468
Email: ipps@du.edu (ipps@du.edu)
Web Site: http://www.du.edu/ipps

Public policy is where law, politics and business meet. It is a multidisciplinary approach to analyzing and evaluating information to solve policy problems. Public policy professionals develop, assess and evaluate alternative approaches to current and emerging issues, such as education, health care, national defense or immigration. The undergraduate program in public policy provides a focused, highly competitive major and minor in public policy for ambitious and motivated students.

Since its creation in 1981, the program has graduated students who have enrolled in some of the best graduate and law schools in the United States; worked as legislative aides for the U.S. Congress or as staff assistants for various branches of government; and have found their studies immediately applicable to the public, private and nonprofit sectors. The undergraduate program in public policy is part of the Institute for Public Policy Studies, which includes the graduate program in public policy and the Center for Public Policy and Contemporary Issues.

Public Policy

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

48 credits in public policy or select courses approved for elective credit by the program director. Requirements include the following:

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPOL 2000</td>
<td>Analysis and Action in American Public Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3230</td>
<td>Analytical &amp; Critical Skills</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 2802</td>
<td>Supreme Court &amp; Public Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 2804</td>
<td>Federal Budgetary Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3115</td>
<td>Economics for Public Policy I: Aggregates and Production</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3116</td>
<td>Economics for Public Policy II: Choices and Competition</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3125</td>
<td>Power and Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3250</td>
<td>Evidence &amp; Logic in Public Policy</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives
Select additional credit in public policy to meet the 48 credit minimum.

Total Credits

48

Students are required to complete a second BA major or a second degree.

Secondary Major Requirements

48 credits. Same requirements as for BA degree.

Minor Requirements

24 credits, including the following:

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPOL 2000</td>
<td>Analysis and Action in American Public Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 2802</td>
<td>Supreme Court &amp; Public Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3230</td>
<td>Analytical &amp; Critical Skills</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 2804</td>
<td>Federal Budgetary Policy</td>
<td>4</td>
</tr>
<tr>
<td>PPOL 3125</td>
<td>Power and Policy</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Select additional credit in public policy to meet the 24 credit minimum.

Total Credits

24

BA/MPP Dual Degree Program

The undergraduate program in public policy offers a dual degree program for highly motivated students. It allows students to earn a BA and a master of public policy (MPP) in just one additional year of study (five total years). Qualified students are accepted to the graduate program in public policy during their junior year and begin taking graduate-level courses during their senior or "transitional" year. In order to qualify, students must have one of the following undergraduate majors: public policy, criminology, economics, political science or sociology.

Courses

PPOL 1910 Hard Choices in Public Policy (4 Credits)
This course provides an opportunity to develop comprehensive knowledge of America's most intriguing public policy dilemmas. Policy issues to be discussed include intergenerational equity, competitiveness, the budget and trade deficits, crime, AIDS, education, health care, the environment, entitlements, immigration, race and affirmative action, public involvement, and social welfare. This course counts toward the Scientific Inquiry: Society and Culture requirement.

PPOL 2000 Analysis and Action in American Public Policy (4 Credits)
This course is designed as a rigorous, analytical introduction for public policy majors to the ways in which American public policy is actually made and includes discussion of (1) Congress; (2) the President; (3) the Supreme Court; and (4) Regulatory agencies. The course is problem-centered and core policy dilemmas are discussed from both cost-benefit and decision-making perspectives. Key topics include the following interrelated issues: (a) fiscal policy and the federal budget; (b) entitlement reform; (c) health care; (d) national security; (e) the financial crisis and economic growth; (f) education; (g) criminal justice; and (h) environmental policy.

PPOL 2610 The City and Public Policy (4 Credits)
In the 1970s and 1980s, America's greatest cities had become virtually ungovernable. Crime was rampant in New York, Washington, Los Angeles, Philadelphia and many other formerly great urban centers. Economic decline was manifest in shrinking populations and the flight to the suburbs. But in the early 1990s, the governing paradigm changed. Led by Mayor Rudolph Giuliani in New York, traditional ideas of governance, law enforcement, the use of public space, and economic development were reasserted. The result was a reversal of the "conventional wisdom"--that the American city was dead or dying--and an unprecedented revival of optimism, based on a newfound appreciation for cities themselves and a reinvigorated understanding of the elements of public policy success. This course examines key public policies involved in (1) effective law enforcement and policing; (2) the determination of public space and public behavior; (3) the shift in urban life from production to creativity; (4) understanding the unique advantages of the urban environment.

PPOL 2701 Topics in Public Policy (4 Credits)
Various topics in public policy are covered. Topics change each term as deemed appropriate with local, regional, and federal policy issues and regulation changes. Prerequisite: PPOL 2000.
Demography is destiny. The consequences for American public policy are profound. America is aging, but becoming more diverse. A society in the midst of dynamic change is a society full of possibilities, but vulnerable to conflict. Values become indeterminate, with traditional communities vying for legitimacy with emergent cultures. Social movements, often populist in nature, challenge the established political order. This course focuses on the delineation of effective public policies to deal with demographic challenges, including (1) immigration policy; (2) the process of assimilation; (3) education; (4) geographic realignment; (5) competitive advantage of the United States relative to the European Union, Russia, and China. This course counts toward the Scientific Inquiry: Society and Culture requirement.

Students examine the policy-making role of the Supreme Court in such areas as civil rights, economic policy, freedom of expression, and criminal justice, while studying the overall power of the Court to determine social policy.

Students gain knowledge of the basics of government fiscal planning through a simulation of the federal budget process.

This course is designed to create understanding of the medical, legal, ethical and public policy issues at each stage of the life cycle. The costs of health care delivery systems are outstripping our ability to pay, yet the demand for new medical technologies continues unabated. Questions must be answered about these costs and demands. In many ways, the health care delivery system presents some of our most vexing public policy dilemmas.

The tools and techniques of economics are essential for policy analysis. This course provides an intensive and comprehensive introduction to the field of economic analysis, with a specific emphasis on the applicability of economics to public policy and problem solving within the field of policy analysis. Topics include supply and demand; gross domestic product; business cycles; classical and neo-classical economic theory; Keynesianism and Keynesian equilibrium; the “Chicago School”; fiscal policy; inflation; stimulation of aggregate demand; employment and unemployment equilibrium; creation of money; the Federal Reserve system; national debt; the financial sector; public and private debt. Prerequisite: sophomore standing. Recommended Prerequisite: PPOL 3115 and sophomore standing.

This course is about money—the fuel that powers American society. Students will develop a sophisticated understanding of the American financial system, while coming to terms with the relationship between money, markets, and government. Students will learn key concepts in public finance, along with the operation of financial instruments like stocks, bonds, commodities and derivatives. Students who take this course will understand monetary and fiscal policy, taxation, exchange rates, and the vital role of credit.

This course focuses on the historical development of American 20th-century policy trends and will emphasize (1) the creation of the regulatory state, beginning in the late 1890s and accelerating through the Progressive Era; (2) the Great Depression, the New Deal, and the rise of entitlement culture; (3) World War II, the rise of the military-industrial state and the suburbanization of the 1950s; (4) the Civil Rights Revolution, the New Frontier and Great Society of Kennedy and Johnson—together with the value changes of the 1960s; (5) the Regan Era and the conservative challenge to big government; and (6) the policy dichotomies and uncertainties.

Students gain the tools necessary to analyze competing points of view using empirical techniques and statistical inference. Students also learn the history and development of the scientific method; how to distinguish between speculation, theory, fact, and opinion; how to identify the validity of data; how to identify the intentional obfuscation of issues; and how to evaluate one’s own prejudices and vulnerability to argument.

This course provides a focus for public policy majors on actual decision-making process within the executive and legislative branches of the federal government. Consideration is given to (1) the role of evidence, empirical analysis, and logic; (2) the role of politics; (3) the role of party affiliation and ideology in the decision-making process; (4) the role of key actors and agencies and the distribution of responsibility; (5) the role of outside experts, such as think tanks and journalists; and (6) the influence of lobbyists and other “rent seekers.” Students consider such critical examples of decision-making as the Cuban Missile Crisis; the Gulf of Tonkin Resolution; the decision to invade Afghanistan and Iraq; congressional decisions relating to “health care reform” in 2009 and 2010; and the executive branch decisions involving the financial crisis of 2008, including the emergency implementation of the Troubled Asset Relief Program (TARP). Students write a detailed policy memorandum to a member of the executive branch or to a congressional leader, containing a situational analysis and action recommendation pertinent to a significant “real time” policy controversy.
PPOL 3280 The Presidency: Primaries (4 Credits)
The 2008 Presidential campaign is the first "open" presidential race in 56 years and features the first woman, African American, Hispanic, and Mormon contenders for the Presidency. This course will follow this historic race through the primaries, caucuses and conventions process and explore how the foundation of the races' public policy is set. Students will go inside the critical earlier primaries and caucuses and learn how Presidential candidates create public policy ideas, convey those ideas to distinct electorates and use those ideas to distinguish themselves from other candidates. The class will study how presumptive nominees prepare for the general election, the party conventions and how they "re-tool" their policy ideas for presentation to the national electorate.

PPOL 3281 The Presidency: General Election (4 Credits)
The 2008 Presidential campaign is the first "open" Presidential race in 56 years and features the first woman, African American, Hispanic, and Mormon contenders for the Presidency. This class will follow in real time the fall campaign of the Presidential race. Students will build on the primary and caucus class and review the general election as it unfolds during the fall. Students will see the impact and influence of public policy on the fall campaign and how it shapes the Presidential race.

PPOL 3282 The Presidency: Policy Making (4 Credits)
The 2008 Presidential campaign is the first "open" presidential race in 56 years and features the first woman, African American, Hispanic, and Mormon contenders for the Presidency. Students discover and analyze how U.S. Presidents create, convey, and implement their public policy ideas and agendas. This discovery and analysis will be done by following, in a close, in-depth and investigative fashion, the first 60 days of the next President and the public policy decisions, strategies, and actions taken by the President and his/her administration.

PPOL 3450 Political Internship (1-10 Credits)
PPOL 3460 Legislative Internship (1-10 Credits)
PPOL 3470 Congressional Internship (1-10 Credits)
PPOL 3701 Topics in Public Policy (4 Credits)
PPOL 3706 Faith and Public Policy (4 Credits)
The influence of faith and religion has been a constant companion in the creation of American public policy. The persuasion has ebbed and flowed, but it has always played a steady and influential role. "Faith and Public Policy" will review the role faith has played and is playing in American public policy. Whether it's the powerful Religious Right, the role of the African American church in public policy or the emerging Religious Left, the arena is always evolving. Students will leave the course with a clearer understanding of the role faith plays and has played in policy, the impact of faith in creating current policy and the role faith will play in future elections.

PPOL 3880 Private Sector Internship (1-10 Credits)
PPOL 3890 Honors Research Project (1-10 Credits)
PPOL 3991 Independent Study (1-10 Credits)
PPOL 3992 Directed Study (1-10 Credits)
PPOL 3995 Independent Research (1-5 Credits)

Franklin L. Burns School of Real Estate & Construction Management

Office: Daniels College of Business, Room 380
Mail Code: 2101 S. University Blvd. Denver, CO 80208
Phone: 303-871-3432
Web Site: http://daniels.du.edu/burns

The Franklin L. Burns School of Real Estate and Construction Management at the Daniels College of Business provides a one-of-a-kind education. With an emphasis on the business of the built environment, The Burns School programs are designed to equip you with the skills necessary to succeed. Our degrees provide students with an understanding of the full life cycle of the built environment while acquiring expertise in a specific education discipline of their choice. This is an advantage because courses are taught from a managerial point of view, as opposed to the strictly technical programs often found in schools of architecture, engineering or technology. Finance, marketing, accounting and management are integrated into your degree to provide an even greater competitive edge. Students in the Burns School have the opportunity to see classroom theory come alive in the city of Denver, a wonderful urban laboratory for applications, research and internships.

The placement record for Burns School graduates has traditionally been very strong. Most of these jobs are a result of professor-industry contacts. Students interested in advanced degrees go on to the Burns School Master of Science in Real estate and the Built Environment, Law school or MBA programs at the University of Denver and other highly respected universities. Careers for students interested in Real Estate and the Built Environment include; real estate development, real estate leasing and brokerage positions, real estate acquisitions, real estate finance, construction project management, corporate real estate, facilities management, property management, real estate appraisers and assessors, real estate asset management, cost estimators and investment fund/asset managers.
Real Estate and the Built Environment

Bachelor of Science in Business Administration Major Requirements

(185 credits required for the degree) (p. 43)

Minimum of 52 credits; maximum of 60 credits. Requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 1700</td>
<td>The Business of the Built Environment</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3007</td>
<td>Real Estate Financial Analysis</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3307</td>
<td>Real Estate Finance</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 2300</td>
<td>Architectural Planning and Design Management</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3438</td>
<td>Legal Issues and Risk Management</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3480</td>
<td>Construction Project Management</td>
<td>4</td>
</tr>
<tr>
<td>FMGT 3110</td>
<td>Corporate Real Estate and Facilities Management</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete requirements for a concentration in Real Estate, Property Development or Construction Project Management 24

Total Credits 52

Real Estate Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 3010</td>
<td>Real Estate Capital Markets</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3317</td>
<td>Real Estate Appraisal and Valuation</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3367</td>
<td>Development and Feasibility</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3369</td>
<td>Real Estate Taxation</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3377</td>
<td>Real Estate Investment Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Select one from below:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>REAL 3210</td>
<td>Planning, Entitlements, and Public Finance</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3337</td>
<td>Real Estate Securities and Syndications</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3347</td>
<td>Management of Income Properties</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3500</td>
<td>Argus Financial Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 24

Property Development Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 3210</td>
<td>Planning, Entitlements, and Public Finance</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3367</td>
<td>Development and Feasibility</td>
<td>4</td>
</tr>
<tr>
<td>REAL 3377</td>
<td>Real Estate Investment Seminar</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 2170</td>
<td>Construction Building Systems</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3120</td>
<td>Construction Scheduling and Project Controls</td>
<td>4</td>
</tr>
<tr>
<td>Select one from below:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3190</td>
<td>Residential Development</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3401</td>
<td>Residential Practicum I</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 24

Construction Project Management Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 2170</td>
<td>Construction Building Systems</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3100</td>
<td>Construction Estimating</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3120</td>
<td>Construction Scheduling and Project Controls</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3170</td>
<td>Construction Accounting and Financial Management</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3177</td>
<td>Environmental Systems and MEP Coordination</td>
<td>4</td>
</tr>
<tr>
<td>CMGT 3200</td>
<td>Construction Contract Administration</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 24

Real Estate Minor Requirements

20 credits as follows:
### REAL 1700 The Business of the Built Environment 4
### REAL 3007 Real Estate Financial Analysis 4
### REAL 3307 Real Estate Finance 4
### REAL 3377 Real Estate Investment Seminar 4

Select one from below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 3210</td>
<td>Planning, Entitlements, and Public Finance</td>
</tr>
<tr>
<td>REAL 3317</td>
<td>Real Estate Appraisal and Valuation</td>
</tr>
<tr>
<td>REAL 3367</td>
<td>Development and Feasibility</td>
</tr>
<tr>
<td>CMGT 2300</td>
<td>Architectural Planning and Design Management</td>
</tr>
</tbody>
</table>

Total Credits 20

### Property Development Minor Requirements

20 credits as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 1700</td>
<td>The Business of the Built Environment</td>
</tr>
<tr>
<td>REAL 3210</td>
<td>Planning, Entitlements, and Public Finance</td>
</tr>
<tr>
<td>REAL 3307</td>
<td>Real Estate Finance</td>
</tr>
<tr>
<td>CMGT 3480</td>
<td>Construction Project Management</td>
</tr>
</tbody>
</table>

Select one from below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 3190</td>
<td>Residential Development</td>
</tr>
<tr>
<td>REAL 3367</td>
<td>Development and Feasibility</td>
</tr>
</tbody>
</table>

Total Credits 20

### Construction Project Management Minor Requirements

20 credits as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 1700</td>
<td>The Business of the Built Environment</td>
</tr>
<tr>
<td>CMGT 2300</td>
<td>Architectural Planning and Design Management</td>
</tr>
<tr>
<td>CMGT 2170</td>
<td>Construction Building Systems</td>
</tr>
<tr>
<td>CMGT 3480</td>
<td>Construction Project Management</td>
</tr>
</tbody>
</table>

Select one from below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 3100</td>
<td>Construction Estimating</td>
</tr>
<tr>
<td>CMGT 3120</td>
<td>Construction Scheduling and Project Controls</td>
</tr>
</tbody>
</table>

Total Credits 20

### Construction Management Courses

**CMGT 2170 Construction Building Systems (4 Credits)**
A survey of residential and commercial construction materials, means, and methods associated with the various structural and architectural systems used to design and construct buildings. Project plans and specifications are incorporated to teach the basic sequencing and overall construction process. The influence of sustainability in construction is introduced. Prerequisite: degree checkpoint 2.

**CMGT 2300 Architectural Planning and Design Management (4 Credits)**
This course introduces students to the significant value that architecture brings to real estate and the built environment and the various services and professions associated with it. Students are introduced to principles, protocols and the planning process related to the design function and the link between the architect’s vision and the finished physical structure. Students are introduced to design thinking theory and application. Students learn to read and interpret the various graphical and written construction documents, know how they are developed and what information they contain. Coverage of architectural, structural, mechanical, electrical, plumbing, and civil drawings and specifications. The business model for design services is explored as well as the unique risks and challenges associated with managing the design throughout the various stages of development and construction.

**CMGT 3100 Construction Estimating (4 Credits)**
This course is designed to provide the student with the theory, principles and techniques of quantity analysis (take-off), labor determinations, overhead and profit analysis. It offers insight into the construction estimating process. The role of the estimator, types of estimating, CSI Divisions, bid/contract documents, change order pricing, design/build projects, and estimation compilation will be introduced. Discussions regarding the cost/benefit of sustainable materials and typical construction materials will enhance the requisite knowledge of construction estimating. Cross listed with CMGT 4420. Prerequisites: CMGT 2170 and degree checkpoint 2.
CMGT 3120 Construction Scheduling and Project Controls (4 Credits)
Understanding and applying scheduling and control to construction projects is essential to successful construction management. Project scheduling emphasizes network-based schedules, such as critical path management (CPM), network calculations, critical paths, resource scheduling, probabilistic scheduling and computer applications. Project control focuses on goals, flow of information, time and cost control, and change management. Prerequisites: CMGT 2170 and degree checkpoint 2.

CMGT 3170 Construction Accounting and Financial Management (4 Credits)
Introduction to construction related accounting practices and financial documents and control systems including: job cost accounting systems, cash flow analysis, schedule of values, labor and operations cost reports, income statements, balance sheets and construction budgets; emphasis on the development of techniques required to effectively monitor the financial aspects of a construction project. Prerequisite: degree checkpoint 2.

CMGT 3177 Environmental Systems and MEP Coordination (4 Credits)
A study of electrical and mechanical systems (MEP) used in the construction of buildings. Course content includes system design, component selection and utilization for energy conservation, cost estimating of systems, coordination and management of installation. Specific systems included are electrical, air conditioning, heating, ventilation and plumbing, fire protection, life safety, communication, power systems and lighting. The course also considers coordination of MEP systems and explores emerging technology and environmental issues related to mechanical and electrical systems in buildings. Cross listed with CMGT 4177. Prerequisite: degree checkpoint 2.

CMGT 3180 Construction Layout/Surveying (4 Credits)
Theory, principles and techniques of construction layout and surveying; field procedures in fundamental surveying; site, foundation and frame layout. Additional course fee. Cross listed with CMGT 4180. Prerequisite: degree checkpoint 2.

CMGT 3190 Residential Development (4 Credits)
A course sequence designed to emphasize the practical application of the theories and concepts of residential development. The course provides a capstone experience for seniors. Students are expected to apply their knowledge of general business, real estate and construction management practices by forming a student business entity, acquiring land, building and selling a residential property in a case format. Students will apply accounting, finance, marketing, real estate and construction management techniques in the planning for a residential development. The application of green building materials and methods is emphasized. Cross listed with CMGT 4490. Prerequisite: degree checkpoint 2.

CMGT 3200 Construction Contract Administration (4 Credits)
This course addresses how a successful construction project is managed and administered from design through construction to closeout. Emphasis is on how to unite the key stakeholders (contractors, architects, engineers, etc.) to provide them with a workable system for operating as an effective project team. The latest technology, laws and regulations associated with contract administration are presented. Topics pertinent to each stage of a project are introduced and discussed as they occur throughout the life of the project. Numerous real-world examples are utilized throughout the course. Various electronic project administration tools and techniques are demonstrated including Building Information Modeling. Prerequisite: degree checkpoint 2.

CMGT 3401 Residential Practicum I (4 Credits)
Practical application of residential development concepts and theories. Students form a business entity to acquire land for, build and sell a single-family residence. Accounting, finance, marketing, real estate and construction management techniques are utilized. Prerequisites: CMGT 2170 and degree checkpoint 2.

CMGT 3438 Legal Issues and Risk Management (4 Credits)
General contract and real estate law, tax law, landlord-tenant law, and various areas of liability for real estate practitioners. Construction contract preparation, bonding and insurance requirements, indemnity agreements, rights and remedies of property owners, contractors and subcontractors, emphasis on administration of a complete contract package for procurement and construction, risk evaluation, assessment, and management strategies. Prerequisite: degree checkpoint 2.

CMGT 3480 Construction Project Management (4 Credits)
This course offers a study of Construction Project Management including different scheduling techniques, use of estimation against scheduling, contracting, construction law, and software use for scheduling. Students obtain the needs for thought process of construction management including scheduling, bidding, proposals, communications, contracts, project planning and initialization, scheduling, estimating, resource planning, organizing, and project control. Use of software is critical and programs are chosen based on independent needs of students. Prerequisite: degree checkpoint 2.

CMGT 3700 Topics in Construction Mgmt (1-10 Credits)
Exploration of various topics and issues related to construction management. Prerequisite: degree checkpoint 2.

CMGT 3980 Construction Management Internship (1-10 Credits)
Practical experience (field study); requires written report. Prerequisite: instructor's permission and degree checkpoint 2.

CMGT 3991 Independent Study (1-10 Credits)
Individual research/study; requires written report. Prerequisite: junior standing and instructor's permission and degree checkpoint 2.

CMGT 3992 Directed Study (1-4 Credits)
Real Estate Courses

REAL 1700 The Business of the Built Environment (4 Credits)
An exploration of the importance of real estate and the built environment and its impacts and influences on how we live, work, and play. The course considers a "cradle to grave" sustainable model that links the various phases, functions, and professions of real estate, project delivery, and asset/facility management to create holistic, value generating solutions for society. Professional practices/skillsets associated with the many career options that engage the built environment are demonstrated. This course has no pre requisites and is open to all undergraduate students.

REAL 1992 Directed Study (1-10 Credits)

REAL 2777 Real Estate Principles and Practices (4 Credits)
This course is designed to give the student a broad overview of the field of real estate, exploring both legal and financial aspects of real property ownership. It serves as the practical introduction to the US perspective on real estate for students with little or no real estate experience. Topics covered in this course include property rights, title concepts, deeds, mortgages and purchase and sale contracts. From both a commercial and residential perspective students will explore aspects of real estate brokerage, financing, appraisal and investing. Other areas covered include fair housing, taxes, leases, zoning, agency and careers within the field of real estate. Prerequisite: degree checkpoint 2. Note: Does not count toward any Real Estate major or minor.

REAL 2992 Directed Study (1-10 Credits)

REAL 3007 Real Estate Financial Analysis (4 Credits)
Alternative analysis formats that can be applied to a wide array of real estate analysis issues; simulates working/decision-making environment; structured overview of analysis tools focused on specific facets of multidimensional real estate decision-making environment; applications in investment analysis, feasibility analysis, valuation, market analysis, and report writing and presentation. Cross listed with REAL 4007. Prerequisites: REAL 3307 and degree checkpoint 2.

REAL 3010 Real Estate Capital Markets (4 Credits)
This course will expose students to the commercial real estate capital markets that have evolved from exclusively private in the 1980's to a mix of private and public including commercial mortgage backed securities (CMBS) and real estate investment trusts (REITs) in the 1990's. Any person involved in real estate today must understand all the alternative capital sources available and their requirements. Students will be exposed to the positives and pitfalls of all the capital market products. Cross listed with REAL 4010. Prerequisites: REAL 3007 and degree checkpoint 2.

REAL 3100 Advanced Issues in Real Estate & Construction Management (4 Credits)
This course offers a broad range of real estate and construction topics that are not covered in other real estate and construction management courses. Examples include marking, negotiations, legal, financial and development issues. Guest experts are brought to class to explain the latest concepts, issues and techniques. Cross listed with REAL 4110. Prerequisites: REAL 3307 and degree checkpoint 2.

REAL 3140 Global Perspectives in Real Estate (4 Credits)
Inbound U.S. and outbound U.S. real estate issues, with a mix of cultural issues that impact real estate transactions. Application of sustainability concepts is important in this course dealing with international real estate issues. Cross listed with REAL 4140. Prerequisite: degree checkpoint 2.

REAL 3210 Planning, Entitlements, and Public Finance (4 Credits)
Real estate development, place making and community building require the combined efforts of the public, for-profit, and non-profit sectors. Participants in the real estate development process need to understand and appreciate the sometimes competing, and sometimes collaborative interests of governments, agencies, and the private developer. This course is designed to familiarize students with the overall context of urban planning and land use. Students discover the variety of participants in the development process and become familiar with the project entitlement process, zoning and land use regulation. Students also examine public/private financing structures such as public-private-partnerships (P3s) and become familiar with detailed calculations relating to Tax Incremental Financing (TIF) and Metropolitan Districts. Prerequisite: REAL 1700 and degree checkpoint 2.

REAL 3307 Real Estate Finance (4 Credits)
Sources of financing including institutions and individuals, primary and secondary mortgage markets, mortgage banking, impact of monetary and fiscal policies on financing, underwriting analysis, traditional and alternative or creative financing techniques. Cross listed with REAL 4407. Prerequisite: REAL 1700.

REAL 3311 Real Estate Internship (1-4 Credits)
Practical experience (field study) in a responsible assignment with a real estate firm; experiences presented to faculty in report form. Maximum 1 quarter hour, unless approved by program director. Prerequisite: degree checkpoint 2.

REAL 3317 Real Estate Appraisal and Valuation (4 Credits)
Appraisal principles, including market, cost and income approaches to value, highest and best use, neighborhood and site analysis; valuation of income properties applying market, cost and income approaches to value; capitalization theory and techniques, mortgage-equity analysis, and investment value concepts. Cross listed with REAL 4417. Prerequisites: REAL 3307 and degree checkpoint 2.

REAL 3337 Real Estate Securities and Syndications (4 Credits)
Introduction to real estate securities; emphasis on private offerings; determining whether a contemplated transaction involves a security, and what happens if it does; exemptions from registration (Reg D); registration requirements; investor suitability, how to syndicate, acquisition of property, marketing of the property, tax structure and formation of syndication, compensation to syndicators, real estate tax considerations. Application of sustainability concepts is important in this class dealing with real estate securities issues. Cross listed with REAL 4337. Prerequisite: degree checkpoint 2.
REAL 3347 Management of Income Properties (4 Credits)
Complex problems of managing apartments, condominiums, office buildings, industrial property and shopping centers; rental markets, development of
rental schedules, leasing techniques and negotiations, repairs and maintenance, tenant relations, merchandising, selection and training of personnel,
accounting, owner relations. Cross listed with REAL 4347. Prerequisite: degree checkpoint 2.

REAL 3367 Development and Feasibility (4 Credits)
This course is designed to give students a hands on approach of the steps necessary in performing market feasibility analysis to emphasize market
research in the development process and understand site selection factors for commercial (office, industrial, retail, apartment, hotel) real estate. The
physical and financial development process is covered in a real world project chosen by the student. This is a capstone course for graduating seniors.
Cross listed with REAL 4467. Prerequisites: REAL 3007 and degree checkpoint 2.

REAL 3369 Real Estate Taxation (4 Credits)
Tax factors affecting real estate investments; legal forms of ownership, capital gain and loss; deductions, credits, depreciation, tax basis, tax impacts on
exchanges, syndications, real estate securities, and other federal tax laws affecting real estate. Application of sustainability concepts are important in
this course dealing with real estate tax issues. Cross listed with REAL 4369. Prerequisite: degree checkpoint 2.

REAL 3377 Real Estate Investment Seminar (4 Credits)
Capstone course for graduating seniors. Case method applied to real property development and real estate investment analysis for decision making;
computer software for discounted cash flow, risk and simulation analysis; growth, sustainability and environmental issues, portfolio strategy and analysis.
Cross listed with REAL 4477. Prerequisites: REAL 3007, degree checkpoint 2 and senior standing.

REAL 3500 Argus Financial Analysis (4 Credits)
The central focus of this course is to expose the real estate student to a broad array of analysis and presentation tools, with practical applications of the
Argus software through interactive examples and case studies. The course is designed to prepare the student for certification which is part of the course
content. It is assumed that the student understands basic real estate principles and financial analysis. Cross listed with REAL 4500. Prerequisites: REAL 3007
and degree checkpoint 2.

REAL 3701 Topics in Real Estate (1-4 Credits)
Prerequisite: degree checkpoint 2.

REAL 3705 Risk Management Insurance (4 Credits)
Insurance issues that arise in business and means for minimizing exposure to risk. This includes liability issues as to persons and property, casualty
and property damage questions, employee and employer insurance areas, auto insurance, professional liability insurance, directors' and owners' liability
issues, medical insurance, and life insurance. Prerequisite: degree checkpoint 2.

REAL 3800 NAIOP Challenge (4 Credits)
Student teams analyze and formulate real-world solutions for an existing complex real estate problem, culminating in internal and external competitions.
Includes a comprehensive written report and oral presentation. Cross listed with CMGT 3800, CMGT 4800, REAL 4800. Prerequisite: Instructor's
permission.

REAL 3980 Real Estate Internship (1-10 Credits)
Prerequisite: instructor's permission.

REAL 3991 Independent Study (1-10 Credits)
Independent study/research; requires written report. Prerequisites: approval of instructor and degree checkpoint 2.

REAL 3992 Directed Study (1-10 Credits)

Department of Religious Studies

Office: Sturm Hall, Room 266
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2749
Email: rlgs@du.edu
Web Site: http://www.du.edu/ahss/religiousstudies

Students who take religious studies courses learn to appreciate the importance of religion in human culture and its role in history. In introductory and
advanced classes, the faculty, who publish and lecture extensively and have received prestigious teaching awards and academic grants, explore both
individual religions and the phenomenon of religion from a variety of perspectives.

Students may pursue a major, secondary major, or minor in religious studies. The department also serves other students who want introductory courses
in religious studies or advanced courses coordinated with their special interests.

The religious studies major is a solid liberal arts program providing graduates with an excellent basis from which to pursue careers requiring imagination,
problem-solving, communication skills and an awareness of human diversity.
Religious Studies

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

Majors take a minimum of 40 credits in religious studies, beginning with 16 credits of introductory courses devoted to specific religious traditions and on-site, observational/experiential learning; a four-credit service learning course; and 12 credits of advanced courses devoted to the theoretical study of religion and intensive writing and research in specialized topics. The remaining eight credits should be chosen in consultation with a department advisor. Students may take approved courses in the study of religion taught by faculty members of other departments and are encouraged to participate in accredited international programs with religious studies content. Honors students and majors demonstrating high academic achievement in the discipline may pursue “distinction in the major” by completing a thesis or customized project on a topic of specific interest that has been designed in consultation with a faculty mentor in the department and approved by the faculty.

Secondary Major Requirements

40 credits. Same requirements as for BA degree.

Minor Requirements

The religious studies minor is a carefully planned program of 20 credits that combines effectively with other majors in the liberal arts and sciences, as well as other fields. Minors take 12 credits of introductory courses devoted to specific religious traditions; four credits of 3000-level courses devoted to the theoretical study of religion; and four credits of electives.

Here is a sample course list of how requirements for the major, secondary major and minor might be fulfilled:

Observational/Experiential Learning - Visit religious communities! Major: 4 courses (16 credits); Minor: 3 courses (12 credits)
- RLGS 3001 Judaism 4
- RLGS 3203 Christianity 4
- RLGS 3500 Islam 4
- RLGS 3814 Modern Hinduism 4
- RLGS 3816 Hinduism Through Texts 4
- RLGS 3820 Buddhism 4

Service Learning - Work in religious communities! Major: 1 course (4 credits); Minor: N/A
- RLGS 2106 Religious and Social Justice in Vienna 4
- RLGS 3641 Religion and Race in America 4
- RLGS 3890 Religion and Diaspora 4
- RLGS 3891 Justice: A Biblical Perspective 4
- RLGS 3892 Grant Writing as Research and Community Engagement 4
- RLGS 3899 International Service Learning Colloquium 4

Writing Intensive - Express yourself! Major: 1 course (4 credits); Minor: N/A
- RLGS 3192 Christian Classics 4
- RLGS 3302 Islamic Fundamentalism 4
- RLGS 3315 Religion & Moral Psychology 4
- RLGS 3503 Quran and Hadith 4
- RLGS 3570 Religion and Morality in the American Public Square 4

Theory - Think about religion in smart ways! Major: 2 courses (8 credits); Minor: 1 course (4 credits)
- RLGS 3300 Psychology of Religion 4
- RLGS 3400 Philosophy of Religion 4
- RLGS 3740 Bodies and Souls 4
- RLGS 3760 Globalization and Religion: Theory and Methods 4
- RLGS 3813 Ritual 4
- RLGS 4000 Theory and Methods in the Study of Religion 4

Electives - Follow your bliss and tailor the program to fit your interests! Major: 2 courses (8 credits); Minor: 1 course (4 credits)
- RLGS 3024 Maimonides: Greek, Islamic, and Christian Encounters 4
- RLGS 3151 Dead Sea Scrolls 4
Courses

RLGS 1101 Religious Lives: Jesus (4 Credits)
The title of this course has a double meaning. On the one hand, the title suggests ours is a study of a religiously important figure. Jesus is one such historical personage. Hence his life is the object of study. The course title also points to the character of the gospels. They are “lives,” “religious lives” of Jesus that arose out of storytelling cultures. In those contexts, stories were read and heard aloud, often “performed” and adapted. Gospels are not “biographies” of Jesus, as we typically think of that genre. It is important to recognize that in “telling the story of Jesus,” the gospel writers were also telling us a story of their own communities, framing stories that would influence how early Christians lived out their religious commitments to Jesus in a world shaped by the forces of late ancient Judaism and Greco-Roman imperialism. We must follow tantalizing clues and draw conclusions from texts--usefully compared to the scripts of plays--that were not interested, primarily, in objective, non-partisan, historical description. Both Jesus and the gospels rivet our attention in this course. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2001 Theory and Method in the Study of Religion: Defining Religion (4 Credits)
This course provides a historical and theoretical introduction to issues, thinkers, and texts in the academic study of religion. Topics covered include the development of religious studies as distinct from Christian theology; definitive questions and problems within the discipline; and the study of religions in relation to race, class, and gender realities.

RLGS 2005 Philosophy of Religion (4 Credits)
What is God? Can God be known or is faith precisely a relationship to something that cannot be known in the ordinary sense? What is the relationship between God and morality? Between God and science? Is it more reasonable to believe that your religion is the only path to God or more reasonable to believe that God is manifest in many ways across different cultures? Is it reasonable to believe in God at all? If it is reasonable to believe in God, what are the reasons? And if believing in God is not based on reasons in the ordinary sense, are there philosophical grounds for believing in God anyway? This course takes a “God friendly” approach to philosophical questions about religion, setting out to investigate ontological and epistemological questions about belief-in-God toward the goal of understanding different ways that philosophers over the years have philosophically gone about developing, upholding, and talking about relationship with God. The course includes consideration of philosophers from analytic and continental traditions, from American and European schools of thought, from ancient, medieval, modern and post-modern traditions, and from Greek, Islamic, Jewish, and Christian traditions. Thinkers to be addressed include Pascal, Anselm, Plantinga, Van Inwagen, Hick, Hume, Descartes, Spinoza, Plato, Aristotle, Ibn Tufayl, Averroes, Maimonides, James, Levinas, Marion, Badiou, Rosenzweig, Aquinas, Buber, Cohen, Mill, Lycan, Kant, Wittgenstein, Kierkegaard, and Kafka. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with PHIL 2005.

RLGS 2014 Religious Existentialism: Christian and Jewish (4 Credits)
Existentialism focuses on the human experience of living, often with a focus on the sheer freedom of the human condition. Religious existentialism subtly modifies this picture through its own vision of human freedom as the ultimate encounter between the human subject and God (with “God” understood in various ways). The religious existentialist in this sense philosophically explores that which is most-fully-human as a moment of relation and encounter between self and that which is beyond self. Starting with Sartre’s non-religious statement of existentialism in Existentialism is a Humanism (1946), we go on to examine the Christian and Jewish existentialisms of Kierkegaard (1813-1855), Tillich (1886-1965), Buber (1878-1965), and Heschel (1907-1972). In the course of our reflections, we compare non-religious with religious approaches to basic questions about self, God and world, and we consider the relationship between Christian and Jewish existentialist approaches to these questions. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross-listed with PHIL 2014 and JUST 2014.

RLGS 2101 Exploring Religion in America (4 Credits)
What do Americans believe? Is there a singular religion or set of religious beliefs that bind together the varieties of American faith traditions and ethnic cultures into a common national identity? E pluribus unum--from the plurality a unity is formed--is one of three official mottoes adapted in 1782 to define and represent the U.S. To what extent is this true, both today and in the past? Americans are faced with the difficult task of creating a harmonious society from the encounter, repulsion, and attraction of discrete civilizations. At the vanguard of modern republican democracy, the U.S. is the central playing field upon which cultural/religious pluralism is negotiated, defined, and legislated. The course explores the evolution of the American nation as a pluralistic belief or faith community and explores the meaning and potential for a singular national religious community. This course counts toward the Analytical Inquiry: Society and Culture requirement.
RLGS 2102 Judaism, Christianity & Islam (4 Credits)
This course introduces students to the three major monotheistic religious traditions: Judaism, Christianity, and Islam. In the process of tracing the long and rich histories of Judaism, Christianity, and Islam, we examine the beliefs and practices that became central and definitive for Jews, Christians, and Muslims. We begin with the ancient heritage of each religion (scriptures, founders, early institutions). Then we explore how these foundational traditions were preserved and re-invigorated in response to centuries of social change and critical moments of political upheaval. Most significant, in this regard, is the Jewish, Christian, and Muslim encounter with their respective holy Scriptures—acceleration after generation of adherents have attempted to understand the revealed words of God, to proclaim their continual relevance for all places and all times and to inscribe them upon their bodies and hearts through prayer, worship, and daily life. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2103 Religions of China & Japan (4 Credits)
This is an introduction of some of the major East Asian religious and ethical traditions, focusing on Buddhism, Confucianism, Daoism, and Shinto. By examining both translations of sacred texts as well as scholarly analyses, we explore the basic ideas, practices, and historical development of these varied and interconnected traditions. Special attention is paid to how people incorporate East Asian religious and ethical ideas and beliefs into contemporary life and how gender shapes the experience of religion. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ASIA 2702.

RLGS 2104 The Bible as Literature (4 Credits)
The Bible has been one of the most important works in all of Western society. In this course we read the Bible as a masterpiece of literature. Rather than focusing on theological questions about this work as inspired scripture, we instead focus on its rich literary qualities and explore some ways in which these stories have influenced modern society. Reading select passages, we discuss its literary genres, forms, symbols and motifs, many of which are important in literature today. Of the latter, we encounter stories of creation and hero tales, parables, apocalyptic literature, and themes of paradise and the loss of Eden, wilderness, covenant, and the promised land. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ENGL 2104 and JUST 2104.

RLGS 2105 Works and Lives (4 Credits)
This course is an introduction to the study of religion through the examination of religious works and lives. For purposes of our exploration, we think of religion as a system of relationships between major ideas and everyday life practices that orient people to a view of the whole of existence. "Works" is a term that covers two major aspects of religions: rituals and moral codes. The term "works" has to do with behaviors, whether they are the behaviors involved in a specifically religious situation (often rituals) or the behaviors in everyday life that are addressed by religious commands and prohibitions (often morals). We also consider stories of lives and guidelines for "lives." Some of these lives are clearly related to daily life within the religious traditions. Some are stories of lives that seem utterly fantastic. We question why such lives are written, what the reader can take from them, and what points they might make. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2106 Religious and Social Justice in Vienna (4 Credits)
This special travel course provides an opportunity for students to learn how certain major religions are globally engaged in the promotion of social justice through humanitarian relief work and cultural exchanges. In addition to a brief survey of the historical relationship between the beliefs, teachings, and social practices of the major Western traditions, the course offers hands-on experience and interaction with Jewish, Catholic, and Protestant relief agencies as well as other non-governmental organizations in Vienna, Austria, which has become the international center for UN-directed human services and humanitarian relief efforts as well as global headquarters for leading NGOs. Students discover how the culture, history, and geography of Vienna have nurtured the vast global human services "economy" to which these religious organizations contribute and which are built around the work of the United Nations. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2107 Culture and Conscience in Vienna (4 Credits)
This study abroad course focuses on the cultural and social history of the city of Vienna as the hub of politics, culture, and religion for Central Europe with special attention to its religious heritage as the seedbed for its rich cultural traditions. The course examines how its religious heritage, particularly Judaism, shaped its rich cultural heritage and the birth of modernism. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with HIST 2107, JUST 2107.

RLGS 2108 Islam in the United States (4 Credits)
A historical introduction to the presence of Islam and Muslims in the United States, from an examination of the first Muslims in North America, to the substantive influence of the minority Indian evangelical Ahmadiyya movement, to Islam in African American communities. Also examines contemporary Muslim communities in the U.S. and the ways in which ritual and faith are today developing with "American" accents. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2109 Religions of Tibet (4 Credits)
This course explores the religious terrain of Tibet by looking at the historical and cultural development of the four main Tibetan Buddhist traditions: Nyingma, Sakya, Kagyu and Geluk, as well as the indigenous religion called Bon. Topics include the sacred landscape of Tibet; key doctrinal features; cultural artifacts like sacred biographies, art, and poetry; the 20th-century spread of Tibetan Buddhism from the Himalayas to North American communities; the future of Tibetan Buddhism in exile; and China and the West. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2110 Buddhism in the U.S.A. (4 Credits)
Exploration of different viewpoints on complex issues related to the assimilation, acculturation and reinvention of Asian Buddhist traditions both locally and globally in the past 150 years. Students consider the "two-way traffic" between recent developments in various traditions of newly Americanized Buddhism and their respective cultures of origin through the processes of globalization and transnationalism. This course counts toward the Analytical Inquiry: Society and Culture requirement.
RLGS 2111 Islam and United States Politics (4 Credits)
This course offers students a historically grounded introduction to the relationship(s) between Islam and United States politics. Students consider the role played by Islam and Muslims in early American political thought, Americans’ relationships with Muslims abroad and at home, as well as evangelization efforts. It examines the impacts of the Nation of Islam, the Cold War, Iranian Revolution and Gulf War I, as well as the September 11 terror attacks, the Iraq and Afghanistan wars, the 2006 and 2008 elections, and concludes by reflecting on the 2012 election and suggesting how Islam might impact U.S. politics over the next decade. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2112 Major Islamic Thinkers 1900s-2000s (4 Credits)
This course offers students a substantive introduction to the major Islamic thinkers of the 20th and 21st centuries. Starting with Abu 'Ala Maududi, whose work on Qur'anic interpretation and the meaning of jihad laid the groundwork for new waves of radical activism in the modern Muslim world, this course exposes students to the works of major "movers and shakers" like Sayyid Qutb and Ayatollah Ruhollah Khomeini. Students engage these thinkers through a mixture of primary and secondary sources, developing a sense of context as they work through these thinkers’ arguments. The course continues with an examination of some of the major later 20th-Century Islamic thinkers active in Muslim-minority spaces, focusing on Bosnian Grand Mufti Mustafa Ceric and the late Moroccan-French scholar Mohammed Arkoun. It concludes by looking at two major figures of the early 21st century, noting how they blend intellectual and political activism: Iranian cleric Mohsen Kadivar and American scholar Amina Wadud. Throughout the course, student groups present on various contemporary issues, helping them develop presentation and writing skills while allowing them to apply course knowledge to real-world issues. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2113 Islamic Empires (4 Credits)
This course offers students a historical introduction to the major empires of the Muslim world. Starting with an overview of the major empires of the late antique Mediterranean (Roman and Sasanid Persian), it provides students with a primer on the rise and major principles of Islam, turning to the Umayyad and Abbasid empires and their roles in supporting the institutionalization and sectarian developments of classical and early-medieval era Islam. Students then examine the emergence of the great Andalusi and North American empires, noting their long-lasting influence on Spain. The course culminates in a multi-week study of the three major early modern sources from each empire and considers the political, social, religious, and economic aspects of each. The course concludes with a look at contemporary attempts to recover or revive the notion of "Islamic empire," connecting past to present. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with HIST 2330.

RLGS 2114 Yoga in History and Practice (4 Credits)
This course explores different ancient and medieval forms of yoga in their Indian cultural contexts as well as modern forms of yoga in India and North America. Some of the issues we will engage include different conceptions of the human self, how and why particular cultural and religious practices cross geographical and cultural boundaries, the role of the guru, and secularization. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with ASIA 2714.

RLGS 2201 Introduction to the Hebrew Bible (4 Credits)
The legacy of the Hebrew Bible has been great for both Western and world culture. In this course, we read the books of the Hebrew Bible critically as literature, as religious text and as a source of sociological knowledge. The students gain a general overview of the narrative and historical development of the text while simultaneously being introduced to the various modes of biblical interpretation. Emphasis is placed on situating the literature and religious expression of the Bible within its ancient Near Eastern milieu. Cross listed with JUST 2201.

RLGS 2202 New Testament (4 Credits)
This course takes a multifaceted approach (historical, literary, and critical) to the writings that comprise the Christian New Testament. The New Testament are read as a collection of primary documents that chronicle the primitive Church’s slow and often painful process of self-definition. In these writings it is possible to discern the tension that arose because of the strong religious and cultural ties early Christianity maintained with Palestinian Judaism, from which it emerged as a sectarian or reform movement. The careful reader also finds evidence of the new religion’s encounter with the Greco-Roman world from whose variegated ethos and culture it borrowed considerably on the way to becoming an important religious force in the first century. In exploring the New Testament, then, we attempt to recover something of the sense of what it meant to be a Christian in New Testament times. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2202.

RLGS 2401 Social Justice in a Global Context: Theory and Practice (4 Credits)
Theories of social justice, beginning with the ancient Hebrews and Greeks and running up through the modern era. The religious sources of these ideas, drawn primarily from the monotheistic faiths of Judaism, Christianity, and Islam, are profiled. This course counts toward the Analytical Inquiry: Society and Culture requirement.

RLGS 2410 Religious Diversity in Israel (4 Credits)
Through religious, sociological and historical sources, as well as documentaries, movies and scholarly readings, this course examines religious diversity in Israel since ts establishment in 1948 to current events today. This course counts toward the Analytical Inquiry: Society and Culture requirement. Cross listed with JUST 2410.

RLGS 2501 Islam on Film (4 Credits)
This course uses the medium of film to introduce students to the history, faith, practice, culture(s), and politics of Islam. Focusing on feature films and documentaries, it employs film to open up a broad spectrum of questions relating to personal piety, gender equity, generational conflicts, social class, governmental repression, and ritual practice. Proceeding thematically along a broad historical frame, the course focuses on the late twentieth and early twenty-first centuries, presenting a balanced picture of life in Muslim-majority and Muslim-minority countries and highlighting the complex picture of Muslim life today.
RLGS 2565 The Church in American History: Challenges and Changes in the Protestant Tradition (4 Credits)
For most of its history, a Protestant majority dominated religion in America. At times, Protestants seized new opportunities to shape and reshape the course of the nation. At other times, influence waned and tensions mounted. This course surveys the history of religion in the U.S. with a primary focus on the challenges and changes within the Protestant church as it has navigated a shifting and increasingly pluralistic culture. We explore how the faithful—from John Winthrop to the modern day evangelicals—have attempted to create a "city upon a hill" through their beliefs, practices, movements, and institutions. Special attention is given to Puritanism, disestablishment, revivalism, Mormonism, the Civil War, the Social Gospel, fundamentalism, civil rights, modern evangelicalism, and pluralism. Cross listed with HIST 2565.

RLGS 2980 Internship (1-4 Credits)
Designed to provide undergraduate majors and minors with valuable experience in non-profit, educational, faith-based, governmental, and related organizations. It helps students translate the knowledge and analytical skills learned in Religious Studies courses into a professional context, while exploring potential career paths and professional opportunities. Students interested in pursuing an internship must meet with the Undergraduate Advisor at the start of the previous quarter to discuss internship goals and identify potential placements. Students meet weekly with a faculty supervisor to monitor their internship experience, and complete the internship by writing a reflective essay. Restrictions: junior or senior standing; at least 20 credits of RLGS courses for majors or at least 12 credits for minors.

RLGS 3001 Judaism (4 Credits)
A literary and historical journey through Judaism. This course examines the "Jewish story" from its roots to its modern-day manifestations, focusing on select, classic Jewish texts in their historical contexts. From them, students explore Jewish tradition and practice and actively engage with and in the vivid interpretive imagination of the authors of Judaism throughout the ages. Cross listed with JUST 3001.

RLGS 3023 Great Thinkers: Maimonides (4 Credits)
Using "The Guide for the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), one of the central figures in medieval philosophy and Jewish thought. Our study includes analyses of his ideas on principles of faith, human perfection, intellectual vs. "imaginational" approaches to truth, pedagogy and politics, reasons for the commandments, the nature of God and divine will, the limits of human knowledge, the mechanics of prophecy, and the parameters and implications of providence. Cross listed with PHIL 3023 and JUST 3023. Prerequisite: junior standing or instructor's permission.

RLGS 3024 Maimonides: Greek, Islamic, and Christian Encounters (4 Credits)
Using the "Guide of the Perplexed" as our central text, we explore the complex philosophical ideas of Moses Maimonides (1135-1204), a central figure in the history of philosophy and in the history of Jewish thought. In this course, we examine in depth the relationship between Maimonides’ core ideas and various Greek, Muslim and Christian thinkers, including: Aristotle, Plotinus, al-Farabi, Avicenna (Ibn Sina), al-Ghazali, Averroes (Ibn Rushd), and Aquinas. Topics to be explored include: what is “metaphysics?”; God’s unity and essence as existence itself; the mystery of knowing and not knowing God (including a consideration of God’s ways as well as “negative theology”–viz. the extent to which we do not know God); God as pure intellect; the nature of the cosmos and the “separate intellects”; creation vs. eternity vs. emanation: philosophical and religious perspectives on the origins of the universe and implications for "living in the world with/out God." In our study, we will also address the methodological implications of cross-religious and cross-language analyses, and how to spot and address (in your own work and in the work of others) tacit cultural biases at play in the interpretive process. Cross listed with PHIL 3024 and JUST 3024. Prerequisite: Junior standing or instructor’s permission.

RLGS 3102 Early Judaism (4 Credits)
This course traces the development of Judaism in history and literature from the Babylonian Exile and the end of the biblical period through the origins of Rabbinic Judaism and the completion of the Babylonian Talmud (c. 650 CE). However, special emphasis is placed on Jewish culture in the late Second Temple period (c. 200 BCE to 100 CE) and its impact on the early Christian movement, including Jewish literature from the time of Jesus, lost texts of the Bible, new evidence from the Dead Sea Scrolls, and the few surviving historical sources of the Second Temple Period. In addition, students analyze how the Bible came to be and understand how sacred texts and their interpretations eventually became the new center of both Judaism and Christianity. Cross listed with JUST 3102.

RLGS 3150 The Bible & Dead Sea Scrolls (4 Credits)
This course includes an advanced study of the Dead Sea Scrolls with a particular focus on the Bible as it appears in the Qumran library. We will discuss the variant versions of the Bible, some of which were previously unknown before the discovery of the Scrolls, and how the findings of the Scrolls may question the very idea of "Bible" itself in the context of the late Second Temple Judaism. Further, we will place particular emphasis on studying the way biblical texts were engaged, interpreted and even written by the authors of the Dead Sea Scrolls. In this way, we shall explore the origins of biblical interpretation and how the notion of the Bible came to be. Cross listed with JUST 3150. Prerequisites: One year of Hebrew language or equivalent or by special permission of the instructor.

RLGS 3151 Dead Sea Scrolls (4 Credits)
The Dead Sea Scrolls represent one of the greatest manuscript finds of the twentieth century and have been said to be the most important discovery in biblical archaeology. These scrolls offer a rare window into early Judaism and Christianity and offer us the earliest and most important witnesses to the (Hebrew) Bible. This course covers the Dead Sea Scrolls in their historical, literary and religious context in English translation, together with relevant scholarly research. Cross listed with JUST 3151.

RLGS 3192 Christian Classics (4 Credits)
Reading and discussion of influential historic books pertaining to Christian life and devotion.
RLGS 3203 Christianity (4 Credits)
This is an introductory course about the Christian religion, with a substantial component devoted to experiential learning. The primary goal of the course is to acquaint students with the richness, dynamism and diversity of one of the world's largest and most influential religious traditions. Even those students who have some general knowledge of Christianity benefit from the disciplined approach of the academic study of religion.

RLGS 3204 Christianity in the British Isles (4 Credits)
It is the contention of this course that Christianity in the British Isles constitutes a singular chapter in the history of the religion and must be approached and appreciated as such. The circumstances surrounding Christianity's introduction to Britain--as documented by the Venerable Bede in his Ecclesiastical History of the English People--presaged a destiny for the English Church that would be "peculiar." With decidedly Roman sympathies, Bede's reforming agenda is presented as historical fait accompli. The narrative nevertheless bears witness to the vibrant and resilient character of Celtic spirituality. Although Henry VIII officially brought the Protestant Reformation to England from the Continent in the 1530s when he severed the English Church from the Papacy, the extent to which the Reformation in England was ever as theologically "Protestant" as it was in Europe is open to debate. The Oxford movement--at once reforming and catholicizing--would otherwise seem incongruous were that not the case. Indeed, as we shall see, the notion of semper reformanda ecclesiae is, perhaps, most suited to this geographical context. Not surprisingly, playwrights, novelists, and filmmakers have found no little inspiration in Anglican reform's concomitant turmoil and intrigue.

RLGS 3212 Development of the New Testament: The Evolution and Transmission of Christian Scripture (4 Credits)
Using a variety of critical methods, this course explores the social, political, and religious influences that shaped the New Testament as it was written, copied, edited, canonized, and translated into its current forms. Students will perform a variety of exercises in class to illustrate the complicated process by which the New Testament was formed.

RLGS 3300 Psychology of Religion (4 Credits)
Beliefs, feelings and actions representing human religious response of experience; function of religion in individual life.

RLGS 3302 Islamic Fundamentalism (4 Credits)
This writing-intensive course introduces students to the history and scope of fundamentalist movements in the Muslim world, focusing on the Middle East. Beginning with a look at the internal traditions of renewal and reform built around the idea of a return to the fundament or origins of Islam, the course examines the rise of major movements from the 1700s to the present. Students will engage with key questions, including the following: What distinguishes fundamentalism from radicalism? How do Sunni and Shi'i fundamentalisms differ? What roles have these movements played in politics and society, and how might these evolve in the future? How might policy makers and others best approach fundamentalist groups? A basic knowledge of Islam is assumed; students wishing to enroll without this background knowledge will be provided supplementary readings.

RLGS 3315 Religion & Moral Psychology (4 Credits)
Philosophical foundations and research strategies of psychological studies of moral thought; Aristotelian, Kantian and utilitarian thought included, as well as religious dimensions of morality.

RLGS 3318 Jesus on the Silver Screen (4 Credits)
First and foremost, this is a course in religious studies. It is a course about Jesus, a religious reformer of late ancient Judaism whose movement, by the end of the first century of the Common Era, gave rise to an identifiably separate tradition. It is a course about New Testament portrayals of Jesus in the Gospels. It is a course about contemporary, historical research on the figure of Jesus. It is also a course about film and cinematography, about reading film critically as a "text," and, in this context, the way in which film "translates" or "transforms" Jesus into another medium. Finally, it is a course about how Jesus films serve to convey modern cultural assumptions.

RLGS 3350 Culture, Psyche, and Religion (4 Credits)
Readings, discussion, and papers help students learn about the life, intellectual and social environment, and clinical and theoretical work of Sigmund Freud. Attention is given to the influence of Freud's work on the understanding of religion at the beginning of the 21st century.

RLGS 3381 Religion & Psychobiography (4 Credits)
Use of different psychological theories to understand life and religious experience of individuals known through historical records.

RLGS 3400 Philosophy of Religion (4 Credits)
Inquiries into nature of religion, religious experience, language, methods of thinking.

RLGS 3452 Political Theology (4 Credits)
A general inquiry, focusing on the modern and postmodern eras, into various forms of philosophical reflection on the relationship between religion and political theory. Survey of the seminal ideas of such major thinkers as Kant, Hegel, Schmidt, Strauss, Derrida, Agamben, Asad, and Zizek.

RLGS 3455 Phenomenology and Theology: Husserl to Marion (4 Credits)
The implications of phenomenology for theology and the issue of theology in relation to phenomenology. The course starts with a reading of Husserl and 19th-century efforts to chart a "phenomenology of religion" in the work of Otto. It also explores the ideas of later figures such as Heidegger, Merleau-Ponty, Henry, Nancy, and Marion. Junior standing required or permission of the instructor. Cross listed with PHIL 3450.

RLGS 3460 Nietzsche & the Death of God (4 Credits)
This course will involve an intensive reading and discussion of Friedrich Nietzsche's "Thus Spake Zarathustra," together with relevant associated materials, especially 'The Gay Science.' Cross listed with PHIL 3460.

RLGS 3465 Derrida and Postmodernism (4 Credits)
Cross listed with PHIL 3465.
RLGS 3475 Deleuze and Semiotics (4 Credits)
Examines the development of the thought of the famous French postmodern thinker Gilles Deleuze with special attention to his cultural and semiotic theory to the degree that it is relevant to the philosophy of religion. The course also investigates how Deleuze's work has shaped, and is beginning to push in new directions, contemporary postmodern philosophy. Prerequisites: must be at least junior standing and have completed at least two undergraduate courses in philosophy.

RLGS 3500 Islam (4 Credits)
Introduction to the history, faith, practice, culture(s), and politics of Islam, starting with the Judeo-Christian Near Eastern context in which it emerged and tracing its theological development and geographic spread around the world. Proceeding thematically along a broad historical frame, the course ends with an examination of the numerous, often competing, trends in contemporary Muslim communities.

RLGS 3501 Pilgrimage in Islam (4 Credits)
Introduction to the ideas and practices of pilgrimage in Islam, focusing on the hajj as Islam's paradigmatic form of pilgrimage and the one to which all others are compared, but also considering other local or "lesser" pilgrimages, often known as ziyarat or visits. The course excavates the history of the practice of pilgrimage, situating it within the social, political, economic and cultural contexts that have helped frame Muslims' understandings of the spiritual and social meanings of various kinds of pilgrimages at different times and places across the Muslim world. The course includes consideration of the hajj experiences of non-Arab Muslims through documentary and news programs, investigates contemporary re-thinkings of the meaning of "hajj", and reflects on the key geo-political and religio-political issues that may surround Muslim pilgrimage in the 21st century.

RLGS 3502 Contemporary Islam (4 Credits)
This course introduces students to contemporary Islam. After a historical overview, the course looks thematically at different spheres of Muslim life. It considers changes that relate to political systems and forms of governance, styles of education, labor and professional work, changes in daily life habits such as timing and organization, changes in gender relations, and changes in religious authority. It also pays attention to the ways in which faith and practice are articulated through cultural practices like pop music and film.

RLGS 3503 Quran and Hadith (4 Credits)
This writing-intensive course introduces students to the key texts of Islam--the Qur'an and hadith--including their origins and meaning as well as how they have been interpreted by Muslims over time, and focusing as well on case studies that highlight issues of crucial relevance for today and the future.

RLGS 3570 Religion and Morality in the American Public Square (4 Credits)
Close focus on one or two moral issues in which religion is drawn into public debate in the contemporary U.S. Observation of the debate first hand at demonstrations, town meetings, and discussion groups, etc. Analysis of these observations is facilitated by readings on the subject and class discussion.

RLGS 3601 Religion and Culture in Vienna (4 Credits)
This course focuses on the cultural, religious and intellectual history of the city of Vienna as the hub of culture for Central Europe during the 19th and 20th centuries with special attention to the arts, philosophy, psychoanalysis, and the critique of Christianity. This course examines how religious past, particularly the influence of Judaism, shaped its rich cultural heritage and the birth of modernism. A special segment of the course is devoted to the Nazi period and the Holocaust, including a study of the resistance of religious groups. The course concludes with a history of the post-Nazi period with attention to the development of Vienna as the center of internation diplomacy and theories of globalization. The class combines lectures and online discussions with site visits to major cultural and historical sites as well as research centers around the city. The first week of the course is online.

RLGS 3604 Faith & Ethics-Religion Biography (4 Credits)
Modes of reconciling private (faith) and public (ethics) in thought and careers of selected modern individuals.

RLGS 3641 Religion and Race in America (4 Credits)
Explores the relationship between racism and religious activism by focusing on the biographies of activists.

RLGS 3680 American Religious Experience (4 Credits)

RLGS 3693 Religion and the Media (4 Credits)
Interactions between religion and all forms of communications media in American life.

RLGS 3701 Topics in Religious Studies (1-4 Credits)
An exploration of various topics and issues related to the academic study of religion. The subject matter of the course varies and may be taught by the regular faculty of the department or a visiting scholar. Some offerings may include a travel component.

RLGS 3707 Religion and Film (4 Credits)
Understanding religion requires us to take culture seriously. In doing so, we must consider products of culture, including popular culture. This course engages both classic and more recent films as “texts” to be analyzed, not as mere entertainments or diversions. We focus not only on those films that identify themselves explicitly as “religious” or reflect a particular religious tradition, but also moved that render the subject more obliquely, which reveal – via image and sound – religion as a complex human activity.

RLGS 3740 Bodies and Souls (4 Credits)
This course examines the unique place of the body in biblical religion. We ask how the Bible and its interpreters have shaped current views on sex and the gendered body in Western society. How has the Bible been (mis)used in relation to current understandings of the physical body? Is the saying that a “human” does not have a body, but is a body as true for the Hebrew Bible as the Christian New Testament? How have Judaism and Christianity valued sexuality, procreation, and celibacy? How do the biblical traditions shape our modern opinions about the ideal physical body and body modifications? How can we understand “out-of-body” experiences and notions of death and afterlife in Western religion? Students are encouraged to interpret the Bible and their own beliefs from a uniquely embodied perspective. Cross listed with GWST 3740, JUST 3740.
RLGS 3760 Globalization and Religion: Theory and Methods (4 Credits)
This course explores how religious movements around the world both affect, and are affected by, the process of globalization. A major segment of the course is devoted to various theories of globalization and how they account for the increasingly important role of religion. Focus is largely on the relationship between Christianity, Judaism, and Islam.

RLGS 3813 Ritual (4 Credits)
Classical and contemporary theories about the meaning, functions, and processes of ritual, and its relationship to "religion."

RLGS 3814 Modern Hinduism (4 Credits)
Doctrines, practices and history of South Asian Hinduism; conceptions of Gods and gods; image worship and temples; and the influences of caste and gender on the experience of Hinduism. Cross listed with RLGS 3814.

RLGS 3816 Hinduism Through Texts (4 Credits)
History of ancient and medieval Hinduism, viewed through the lens of religious texts. Cross listed with ASIA 2706.

RLGS 3820 Buddhism (4 Credits)
Buddhist life and thought from origins to present in India, Tibet, Japan and China. Cross listed with ASIA 2704.

RLGS 3830 Buddhist Lives (4 Credits)
This course explores the literary canon of Buddhist life stories across time, traditions and cultures. Cross-listed with ASIA 3830.

RLGS 3832 Religious Lives: The Dalai Lamas (4 Credits)
This course explores the many lives of the Dalai Lamas and the transformation of a reincarnated religious teacher into the political leader of Tibet and, eventually, a worldwide religious personality. In order to understand that transformation, the course investigates the institution of the Dalai Lamas from historical, doctrinal, and ritual perspectives. We will look at the role of the Dalai Lama as an embodiment of the bodhisattva of compassion at the center of a tapestry of religious ceremony and ritual performances. The course will also consider the religious, ethical, and political thought of several of the most prominent Dalai Lamas, with significant attention given to the writings and work of the current, fourteenth, Dalai Lama. Cross listed with ASIA 3732.

RLGS 3890 Religion and Diaspora (4 Credits)
When forced to leave a homeland, displaced communities frequently turn to religion to maintain identity and adapt to--or resist--new surrounding culture(s). This course examines the role of religion and identity in three Jewish and Christian communities living in diaspora and poses questions such as the following: What is the relationship between religion and (home)land? How have the biblical themes of exodus, diaspora, promise and restoration been applied to contemporary experiences? And how have our American stories been interpreted through the lens of the Bible? As part of the service learning component, students have the opportunity to work with religious and immigrant aid organizations in the Denver community. Cross listed with JUST 3890.

RLGS 3891 Justice: A Biblical Perspective (4 Credits)
This is a service learning course designed for religious studies undergraduate majors, though non-majors are welcome to enroll. Cross listed with JUST 3891.

RLGS 3892 Grant Writing as Research and Community Engagement (4 Credits)
This service learning / community engagement course introduces student to non-profit work and to scholarship on non-profit activities. It connects students with community partners, continuing the department's commitment to experiential learning and to engagement with living faith communities. Students spend course time discussing scholarly research on grant writing and non-profit grant support and discussing logistical and other issues related to their service learning placements. This course is intended to help provide M.A. students with arenas for future research, including possible thesis topics, while also offering a unique practical opportunity for professional development. Experience in forming a 501(c)3 corporation and writing grant proposals will be an asset for students planning to work in non-profits as well as for those continuing on to doctoral work.

RLGS 3899 International Service Learning Colloquium (4 Credits)
The colloquium is the service learning core of the Vienna faculty-led study abroad program. Undergraduate students must sign up concurrently with RLGS 2401. In conjunction with the colloquium, students perform a total of approximately 60-75 hours of service learning as well as weekly "dialogue" sessions of two hours each. Dialogue sessions focus among students on common experiences, insights, problems, and challenges they have met in an intercultural and international service learning setting. A number of these sessions are conversations with representatives of, or visits to, different United Nations agencies of NGOs pertaining to social justice work and global issues. Dialogue sessions are scheduled in accordance with the availability of personnel and their relevance to the topic at hand.

RLGS 3991 Independent Study (1-10 Credits)
RLGS 3992 Directed Study (1-10 Credits)
RLGS 3995 Independent Research (1-10 Credits)

Social Justice Living and Learning Community
Office: Driscoll Center South, Suite 1
Mail Code: 2055 E. Evans Ave. Denver, CO 80208
Phone: 303-871-7428
Email: Catherine.Orsborn@du.edu
Web Site: http://www.du.edu/livinglearning/socialjustice/
Courses

SJUS 2010 Social Justice: Exploring Oppression (1,2 Credit)
This course examines how writers, visual artists and filmmakers have used the arts to explore and advance the cause of social justice. In addition to reading and viewing works of art with a social justice these, students perform the work of social justice themselves by volunteering with one of the Living and Learning Community’s community partners and then reflecting on that experience by creating verbal and visual art works of their own.

SJUS 2020 Intellectual Foundations of Social Justice (1,2 Credit)
This course introduces students to major debates in the contemporary social justice movement and explores their origins in the works of philosophers and theorists. Students use this intellectual framework to analyze their own experience of working for social justice with the Living and Learning Community’s community partners.

SJUS 2030 Social Justice and Digital Activism (1,2 Credit)
Students learn how today’s social justice activists use digital media to advance their causes, and collaborate with the Living and Learning Community’s community partners to create digital media of their own.

SJUS 2100 Justice Across Cultures: Cultural Perspectives on Social Justice (4 Credits)
Social justice is a complex and multi-faceted issue. That which constitutes social justice has been understood in a variety of ways across cultures and time. Students in this course explore the concepts of social justice by examining a variety of cultural and religious approaches to the subject paying explicit attention to non-western perspectives. The course pays particular focus on current controversies over global policy issues, including the UN Declaration of Human Rights, and students examine the divergent ideologies of social justice that lie behind these complex debates.

Socio-Legal Studies

Office: Sturm Hall, Room 409
Mail Code: 2000 E. Evans Ave. Denver, CO 80208
Phone: 303-871-2048
Email: nancy.reichman@du.edu
Web Site: www.du.edu/ahss/sociolegal/

Law has long been one way of ordering and understanding the world. Students who major or minor in socio-legal studies—an interdisciplinary program within the Division of Arts, Humanities and Social Sciences—focus on fascinating questions that strike at the heart of modern society: How does law operate in people’s everyday lives? How do social institutions shape law? How are social institutions shaped by law? How does law empower and constrain individuals, groups, organizations and communities? Students majoring in socio-legal studies often pursue a legal career, but the issues addressed in the major are relevant to all fields of endeavor; law permeates every aspect of social life.

Socio-Legal Studies

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

All students must take a minimum of 40 credits of coursework. To ensure a broad education, students majoring in Socio-Legal Studies must also complete a second major.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 1810</td>
<td>Introduction to Law and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2120</td>
<td>Methods of Socio-Legal Inquiry</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2755</td>
<td>Legal Actors and Institutions</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Remaining hours must be selected from the following approved electives (see internship option below) and topics courses approved by the director.

Environmental Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVI 3000</td>
<td>Environmental Law</td>
<td>4</td>
</tr>
</tbody>
</table>

Media, Film and Journalism Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJS 3040</td>
<td>Media Law</td>
<td>4</td>
</tr>
<tr>
<td>MFJS 3700</td>
<td>New Media Law &amp; Regulation</td>
<td>4</td>
</tr>
</tbody>
</table>

Philosophy

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 2040</td>
<td>Practical Logic</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2150</td>
<td>Philosophy of Law</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2180</td>
<td>Ethics</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>PHIL 2184</td>
<td>Ethics, Individuals, &amp; the Law</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2700</td>
<td>Biomedical Ethics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 3061</td>
<td>Kant's Ethics/Aesthetics/Politics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 3175</td>
<td>Morality and the Law</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 3176</td>
<td>Advanced Topics in Philosophy of Law: Rights, Legal Institutions, and Justice</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 3178</td>
<td>Metaethics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 3701</td>
<td>Topics in Philosophy</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Political Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 2001</td>
<td>Law and Politics</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2700</td>
<td>Topics in Political Science</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2701</td>
<td>Topics in Political Science</td>
<td>1-4</td>
</tr>
<tr>
<td>PLSC 2820</td>
<td>Civil Rights and Liberties</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2830</td>
<td>Law and Social Policy</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2840</td>
<td>International Law &amp; Human Rights</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2860</td>
<td>Constitutional Law &amp; Politics</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 2880</td>
<td>Taming Tyranny: How Constitutions Frame Freedom</td>
<td>4</td>
</tr>
</tbody>
</table>

Sociology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 2250</td>
<td>Criminology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2260</td>
<td>Deviance and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2750</td>
<td>Sociology of Law</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2760</td>
<td>Discipline and Punishment</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2765</td>
<td>The Female Offender</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2770</td>
<td>Kids and Courts</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2775</td>
<td>Wrongful Conviction</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2780</td>
<td>Women and the Law</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2785</td>
<td>Family and the Law</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2790</td>
<td>Policing Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2795</td>
<td>Capital Punishment</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2820</td>
<td>Drugs and Society</td>
<td>4</td>
</tr>
</tbody>
</table>

Internships

Student may complete pre-approved internships to fulfill up to 8 credits toward the major. Major and minor courses cannot be double counted. 1-8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

Total Credits 40

Secondary Major

40 credits. Same requirements as for BA degree.

Minor Requirements

The minor requires 20 credits including one of the following: PLSC 1810 Introduction to Law and Society, SOCI 2120 Methods of Socio-Legal Inquiry, SOCI 2755 Legal Actors and Institutions. Remaining credits are selected from electives listed in the major. Only one course in the student's minor can be from that student's major area. Student may complete a pre-approved internship to fulfill up to 4 credits toward the minor. Major and minor courses cannot be double counted.

Department of Sociology and Criminology

Office: Sturm Hall, Room 446
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303.871.2948
Email: sociology@du.edu
Web Site: http://www.du.edu/ahss/sociology/

What causes delinquent and criminal behavior? Why do gender, racial and class inequalities exist in nearly every society? What are the origins of the self? These are the kinds of questions sociologists and criminologists attempt to answer. For students interested in sociology or criminology, the department offers non-majors an understanding of human social systems as part of a liberal arts education and prepares majors for graduate or
professional school. The broad perspectives of sociology and criminology are also useful backgrounds for students planning to enter a variety of careers such as law, social work, education or management.

Our low student/faculty ratio allows professors to guide, counsel and advise students according to individual needs and career goals. As well as taking an active, creative role in the classroom and as advisors, DU professors are involved in exciting research projects in which undergraduate students can participate. The department also offers an internship program designed to give sociology and criminology majors and minors the opportunity to gain valuable work experience in a community agency.

Many of the department’s majors go on to law school or to graduate programs in sociology, criminology or social work. Others choose to work in various social service agencies, private organizations and businesses.

Sociology

The sociology major provides a general background in theory, methods and a variety of substantive areas within sociology.

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

Program note: Students may not double-major, double-minor or major-minor in both sociology and criminology.

40 credits, including the following:

Required coursework

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2020</td>
<td>Sociological Classics</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2005</td>
<td>Sociological Imagination and Inquiry--Part A</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2006</td>
<td>Sociological Imagination and Inquiry--Part B</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2420</td>
<td>Social Inequality</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 3999</td>
<td>Sociology Assessment</td>
<td>0</td>
</tr>
</tbody>
</table>

Electives

Complete additional sociology courses to meet the 40 credit minimum. Up to eight credits can be internship.  

Total Credits

40

Internship note: Students must meet the following prerequisites to enroll in the internship program: have junior or senior standing, be sociology or criminology majors or minors, have a cumulative GPA of 3.0 and have taken at least three sociology- or criminology-related courses beyond Understanding Social Life (SOCI 1810).

Secondary Major

40 credits. Same requirements as for BA degree.

Minor Requirements

Pre-law and pre-social work students will find a minor in sociology especially helpful to their long-term careers.

Program note: Students may not double-major, double-minor or major-minor in both sociology and criminology.

20 credits, including:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives

Complete additional sociology courses to meet the 20 credit minimum. Up to four credits can be the internship.

Total Credits

20

Criminology

The criminology major provides a general background in theory and methods and a variety of substantive courses on the creation and application of criminal law, the causes of criminal behavior and societal responses to lawbreaking.
# Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

Program note: Students may not double-major, double-minor, or major-minor in both sociology and criminology.

40 credits, including the following:

## Required coursework

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2020</td>
<td>Sociological Classics</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2005</td>
<td>Sociological Imagination and Inquiry--Part A</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2006</td>
<td>Sociological Imagination and Inquiry--Part B</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2250</td>
<td>Criminology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 3998</td>
<td>Criminology Assessment</td>
<td>0</td>
</tr>
</tbody>
</table>

## Electives

1 elective from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 2255</td>
<td>Juvenile Delinquency</td>
</tr>
<tr>
<td>SOCI 2260</td>
<td>Deviance and Society</td>
</tr>
<tr>
<td>SOCI 2710</td>
<td>Crime and Inequality</td>
</tr>
<tr>
<td>SOCI 2750</td>
<td>Sociology of Law</td>
</tr>
<tr>
<td>SOCI 2755</td>
<td>Legal Actors and Institutions</td>
</tr>
<tr>
<td>SOCI 2760</td>
<td>Discipline and Punishment</td>
</tr>
<tr>
<td>SOCI 2765</td>
<td>The Female Offender</td>
</tr>
<tr>
<td>SOCI 2770</td>
<td>Kids and Courts</td>
</tr>
<tr>
<td>SOCI 2775</td>
<td>Wrongful Conviction</td>
</tr>
<tr>
<td>SOCI 2780</td>
<td>Women and the Law</td>
</tr>
<tr>
<td>SOCI 2785</td>
<td>Family and the Law</td>
</tr>
<tr>
<td>SOCI 2790</td>
<td>Policing Society</td>
</tr>
<tr>
<td>SOCI 2795</td>
<td>Capital Punishment</td>
</tr>
<tr>
<td>SOCI 2820</td>
<td>Drugs and Society</td>
</tr>
<tr>
<td>SOCI 2830</td>
<td>White-Collar Crime</td>
</tr>
<tr>
<td>SOCI 2855</td>
<td>Crime and the Media</td>
</tr>
</tbody>
</table>

## Total Credits

40

---

1. Up to eight credits can be the internship. Internship note: Students must meet the following prerequisites to enroll in the internship program: have junior or senior standing, be sociology or criminology majors or minors, have a cumulative GPA of 3.0 and have taken at least three sociology- or criminology-related courses beyond Understanding Social Life (SOCI 1810).

2. And/or from selected topics approved by the chair.

## Secondary Major

40 credits. Same requirements as for BA degree.

## Minor Requirements

Students interested in law or law enforcement will find a minor in criminology especially helpful to their long-term career goals.

Program note: Students may not double-major, double-minor or major-minor in both sociology and criminology.

20 credits of criminology-related courses, including the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 2250</td>
<td>Criminology</td>
<td>4</td>
</tr>
</tbody>
</table>

## Electives

1 elective from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 2255</td>
<td>Juvenile Delinquency</td>
</tr>
<tr>
<td>SOCI 2260</td>
<td>Deviance and Society</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>SOCI 2710</td>
<td>Crime and Inequality</td>
</tr>
<tr>
<td>SOCI 2750</td>
<td>Sociology of Law</td>
</tr>
<tr>
<td>SOCI 2755</td>
<td>Legal Actors and Institutions</td>
</tr>
<tr>
<td>SOCI 2760</td>
<td>Discipline and Punishment</td>
</tr>
<tr>
<td>SOCI 2765</td>
<td>The Female Offender</td>
</tr>
<tr>
<td>SOCI 2770</td>
<td>Kids and Courts</td>
</tr>
<tr>
<td>SOCI 2775</td>
<td>Wrongful Conviction</td>
</tr>
<tr>
<td>SOCI 2780</td>
<td>Women and the Law</td>
</tr>
<tr>
<td>SOCI 2785</td>
<td>Family and the Law</td>
</tr>
<tr>
<td>SOCI 2790</td>
<td>Policing Society</td>
</tr>
<tr>
<td>SOCI 2795</td>
<td>Capital Punishment</td>
</tr>
<tr>
<td>SOCI 2820</td>
<td>Drugs and Society</td>
</tr>
<tr>
<td>SOCI 2830</td>
<td>White-Collar Crime</td>
</tr>
<tr>
<td>SOCI 2855</td>
<td>Crime and the Media</td>
</tr>
</tbody>
</table>

**Total Credits**: 20

1. Up to four credits can be the internship. Internship note: Students must meet the following prerequisites to enroll in the internship program: have junior or senior standing, be sociology or criminology majors or minors, have a cumulative GPA of 3.0 and have taken at least three sociology- or criminology-related courses beyond.

2. And/or selected topics approved by the chair.

**Courses**

**SOCI 1810 Understanding Social Life (4 Credits)**
This course is an introduction to the discipline of sociology and to the insights it provides into the human condition. This course counts toward the Scientific Inquiry: Society and Culture requirement.

**SOCI 1992 Directed Study (1-10 Credits)**

**SOCI 2005 Sociological Imagination and Inquiry--Part A (4 Credits)**
This course is the first of a two-quarter sequence on sociological research methods and focuses on introducing students to the many qualitative methods used in sociological research. We explore what social research is, what the goals of such research are, and how research questions guide the selection of different methodologies. The remainder of the course focuses on qualitative data collection, including in-depth interviewing, ethnographic methods, historical comparative and content analysis methods, and other qualitative methods. Prerequisites: SOCI 1810 and sophomore standing or permission of instructor.

**SOCI 2006 Sociological Imagination and Inquiry--Part B (4 Credits)**
This course is the second of a two-quarter sequence on sociological research methods, and examines how sociological research questions can be answered using quantitative methods. Specifically, the course focuses on survey research design and statistics. Prerequisites: SOCI 2005 and sophomore standing or permission of instructor.

**SOCI 2020 Sociological Classics (4 Credits)**
Two or more classic works read and discussed in detail; emphasis on understanding particular classical work and its place in sociological tradition. Prerequisite: SOCI 1810 and sophomore standing or permission of instructor.

**SOCI 2050 Political Sociology (4 Credits)**
General sociological perspective on social bases of politics in their historical context, theoretical tradition and empirical foci; explore four major topics: 1) issues, perspectives, and variations in political thought; 2) social bases of politics: stratification, socialization and ideology; 3) power; and 4) political participation. Prerequisite: SOCI 1810.

**SOCI 2060 Self and Society (4 Credits)**
Impact of social groups and socialization processes on formation of individual perceptions, thoughts, emotions and self-awareness; both normal and deviant formations considered. Prerequisite: SOCI 1810.

**SOCI 2120 Methods of Socio-Legal Inquiry (4 Credits)**
This course provides a broad overview of socio-legal research methods. Specifically, the course examines how qualitative and quantitative research methods are used to answer socio-legal research questions. Students participate in research in order to understand the process of designing a project, collecting data, analyzing data, and reporting findings.

**SOCI 2140 Urban Sociology (4 Credits)**
Sociological study of the city focuses on interrelationships among people, social institutions and space; process of urban development; comparison of competing theoretical perspectives. Prerequisite: SOCI 1810.
SOCI 2190 American Communities (4 Credits)
Study of 'community' as a foundational concept in the discipline; consideration of the changing structural contexts of community, as well as the social-psychological aspects of community; emphasis on emerging forms of community in the contemporary U.S. Prerequisite: SOCI 1810.

SOCI 2210 The Family (4 Credits)
Emphasis on different kinds of families and on contemporary issues of changing gender roles, intimacy, childbearing, family breakup and reconstitution, and family's relationships with other social institutions. Cross listed with GWST 2210. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2220 Sociology of Childhood (4 Credits)
This course explores the social meanings of childhood. In this course we will examine aspects of the symbolic meanings of childhood as well as the experiences of being a child. The commercialization of childhood through marketing to children, contradictory messages about children as innocent or problematic, the experience of gender socialization for children, and the expectations of creating perfect children will be explored in detail. Cross listed with GWST 2220. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2240 Sociology of Health (4 Credits)
This course explores questions of how individuals experience health and illness, how they interact with institutions and providers, and how these experiences are filtered through social structures that lead to inequality. Using a sociological perspective, we analyze how individuals' experiences of health and illness, medical institutions, and work in the health professions are influenced by racial/ethnic background, gender, social class, sexual identity, and age. We analyze these concepts by looking at who gets to define health and illness as well as how medical decisions are made, including who has the right to make decisions, what are the limits on the kinds of decisions that can be made, and how are decisions enforced and challenged by law. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2250 Criminology (4 Credits)
Social meaning of criminal behavior; relationship between crime and society in particular, how production and distribution of economic, political and cultural resources shape construction of law, order and crime; different types of crime, criminals and victims, and efforts to understand and control them. This course counts toward the Scientific Inquiry: Society and Culture requirement.

SOCI 2255 Juvenile Delinquency (4 Credits)
Introduction to sociological study of delinquency in American society; history of juvenile delinquency, the creation of delinquent misconduct as a social and legal category, and current state of delinquent behavior. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2260 Deviance and Society (4 Credits)
Examines some behaviors often called deviant, such as mental illness, substance abuse, governmental crime and unconventional lifestyles, and asks what groups call them deviant, why and how behavior affects community. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2270 Sociology of Religion (4 Credits)
Sociological investigation of religion; how religion has influenced society, politics, gender equality; how society has influenced religion; why people participate in religion. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2320 Race and Ethnic Relations (4 Credits)
Relationship of racial and ethnic minority groups to systems of social stratification; emphasis on United States. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2420 Social Inequality (4 Credits)
Dimensions of social class and its effect on economic, political and social institutions as well as style of life. Cross listed with GWST 2420. Prerequisite: SOCI 1810 and sophomore standing or permission of instructor.

SOCI 2500 Schooling and Society (4 Credits)
The objective of this course is to examine the relationship between schooling and the larger social inequalities (e.g., racism, poverty, and gender) that profoundly shape education. The major focus in this seminar will be on U.S. K-12 public education. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2540 Current Social Problems (4 Credits)
We often think about social problems in our social worlds. However, rarely do we consider how certain situations come to be defined as problems and why some "problems" remain a focal point of public attention while others fade, even when the circumstances around that issue have not improved. In this course, we look at these very issues. Using current social problems, we explore how a social phenomenon comes to be seen as a social problem, what is at stake in this process, and how these dynamics matter in terms of thinking about inequality. This course counts toward the Scientific Inquiry: Society and Culture requirement.

SOCI 2565 Men and Masculinities (4 Credits)
Many of us believe that anatomy is what determines our behavior and that our bodies dictate our social and psychological temperament. Looking specifically at men and masculinities, this course tests that general notion, investigates the various ways male behavior is gendered and critically explores the meanings of masculinity in contemporary institutions. Throughout the course, we look at the multidimensional and multicultural ways masculinity is produced, constructed, enacted, and resisted; how masculinities structure power and resources; and how masculinities benefit, regulate, and hurt men's lives. Cross listed with GWST 2565. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2611 Research Practicum (1-4 Credits)
Research process of hypothesis formation, data collection, data analysis and interpretation of results through collaboration with ongoing faculty research or through developing a guided individual research project. Prerequisites: SOCI 1810 and junior or senior standing.
SOCI 2612 Research Practicum (1-4 Credits)
Research process of hypothesis formation, data collection, data analysis and interpretation of results through collaboration with ongoing faculty research or through developing a guided individual research project. Prerequisites: SOCI 1810 and junior or senior standing.

SOCI 2613 Research Practicum (1-4 Credits)
Research process of hypothesis formation, data collection, data analysis and interpretation of results through collaboration with ongoing faculty research or through developing a guided individual research project. Prerequisites: SOCI 1810 and junior or senior standing.

SOCI 2614 Research Practicum (1-4 Credits)
Research process of hypothesis formation, data collection, data analysis and interpretation of results through collaboration with ongoing faculty research or through developing a guided individual research project. Prerequisites: SOCI 1810 and junior or senior standing.

SOCI 2640 Community Response to Natural Disasters (4 Credits)
Introduction to social science literature of human response (including families, emergency organizations and communities) to natural disasters, e.g., hurricanes, floods, tornadoes. Emphasis on assessing use of social science knowledge as a basis for public policy guidance. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2650 Sociology of Immigration (4 Credits)
This course applies a sociological approach to the study of international migration. Students examine early and contemporary waves of migration to the U.S.; theories of migration; processes of settlement and incorporation; the construction of immigration and citizenship; and institutional responses to immigration across and within immigrant groups. The course also examines variation in immigrant experiences along the lines of race/ethnicity, gender, and sexual and age identities. The course culminates in an examination of the impact of migration on the U.S. and on immigrants' sending communities. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2655 Latina/os in American Society (4 Credits)
Latinas and Latinos constitute one of the largest and fastest growing ethnic groups in the United States. This course uses a sociological lens to understand Latina/os’ experiences in the U.S. Specifically, we address Latinas' and Latinos' historical experiences and migration trajectories; assimilation, incorporation and racial/ethnic identity formation; the family, schools and labor markets; and political participation. In so doing, we discuss and challenge stereotypes about Latina/os, present alternative perspectives about Latina/o experiences in the U.S. and most importantly, understand their contributions to their families, their communities, and to the nation as a whole. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2670 Topics in Sociology (4 Credits)
Topics vary. Recent topics have included urban poverty, ethics, women and crime, and school and workplace violence. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2710 Crime and Inequality (4 Credits)
This course conducts a systematic investigation of the nature of inequality as it is related to crime and criminal justice in America. Racial, gender and class disparities are explored at critical stages of the criminal justice process, including crime commission, law-making, policing, court actions, and sentencing. This course considers the effects of inequality - particularly on system functions, employment opportunities, family stability and offenders’ communities. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2719 Social Movements (4 Credits)
Studies in range of perspectives and research issues pertinent to understanding of social movements (groups operating without clear-cut direction from established social structure and culture). Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2730 Gender in Society (4 Credits)
How the biological fact of sex is transformed into socially created gender roles. How individuals learn they are male and female, and how their behaviors are learned. A look at gender distinctions built into language, education, mass media, religion, law, health systems and the workplace. Cross listed with GWST 2730. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2741 Work and Occupations (4 Credits)
How individuals fit into, are influenced by and in turn influence business institutions; changes in structure and meaning of workplace; different types of business and work relationships, forms of work, business roles and organizational structures; how business institutions affect society as a whole. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2750 Sociology of Law (4 Credits)
Overview of theory and research about relationship between law and society; legal rules, roles, organizations and inter-institutional relations; activities of legal profession, courts, juries, legislatures and regulatory agencies. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2755 Legal Actors and Institutions (4 Credits)
This course examines the legal system from the points of view of those who work within it. It considers the social characteristics of lawyers, judges, regulators, and even non-state actors and how they matter to the social construction of law. The emphasis is on the social organization of law and the everyday interactions that bring meaning to the legal system. It considers both local and global perspectives and seeks to understand how the changing locations of law influence its practice. Through the course, students are required to think critically about how the social relationships of law influence law's outcomes.

SOCI 2757 State Violence (4 Credits)
This course applies a socio-legal approach to the study of state violence. We will explore the ways that social institutions, culture, and law shape states’ uses of violence both internationally and domestically. We will also examine the socio-legal foundations of efforts to control and collectively respond to state violence. Prerequisite: SOCI 1810 or permission of instructor.
SOCI 2760 Discipline and Punishment (4 Credits)
Institutional mechanisms for imposing discipline and for punishing wayward individuals and groups; contradictory social objectives of punishment and corrections; organizational settings for administering punishment and identifying predominant institutional routines in coercive environments. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2765 The Female Offender (4 Credits)
Female offenders are one of the fastest growing segments in both the juvenile and adult justice systems. This course introduces students to debates and issues surrounding girls, women, and crime; explores different theoretical perspectives of gender and crime; and examines the impact of gender on the construction and treatment of female offenders by the justice system. In addition, this course specifically looks at girls' and women's pathways to offending and incarcerations; understanding girls' violence in the inner city; exploring the reality of prison life for women, with a particular focus on the gender-sensitive programming for incarcerated mothers; and ending with an examination of how capital punishment has affected women offenders historically and contemporarily. Cross listed with GWST 2765. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2770 Kids and Courts (4 Credits)
This course examines how American society has responded to the problem of at-risk and delinquent youth in the twentieth and twenty-first centuries. The primary focus will be on the juvenile court's and the encompassing juvenile justice system's efforts to address this problem. The court's and the system's ameliorative attempts to help at-risk children/adolescents as well as their more punitive policies directed at serious and violent young offenders will be investigated. Differences in juvenile court policies and practices over time and across jurisdictions (both in the United States and in other countries) will be considered. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2775 Wrongful Conviction (4 Credits)
The criminal justice system was once considered infallible--innocent people did not end up in prison. But DNA evidence has revealed that innocents are incarcerated and perhaps even executed. This course focuses on the prevalence of wrongful conviction; the harms caused by wrongful conviction; the causes of wrongful conviction; strategies for reducing wrongful conviction; and the prospect of compensating the wrongfully convicted. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2780 Women and the Law (4 Credits)
This course explores the relationship between women and the law, looking at the way the categories of sex and gender have been produced and reproduced through law. Through a look at case law and sociological research, students will examine women as bodies, workers and family members. This course also explores the development and current status of American law in the areas of women's constitutional equality, pay equity and equal opportunity, women's access to education, women in the workplace and violence against women. Cross listed with GWST 2780. Prerequisite: SOCI 1810 or permission of the instructor.

SOCI 2785 Family and the Law (4 Credits)
The government is actively involved in deciding who gets to be a family and what families should look like. The state and its laws are involved in shaping family life, making decisions for family members, and mediating familial conflict. This course looks at the appropriate role of the state in family life by examining state legislation and court decisions and social research on a variety of topics. Cross listed with GWST 2785. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2790 Policing Society (4 Credits)
Emergence and development of police organizations and tactics; factors that influence policing styles and objectives; historical precedents; policing the street; policing the board room; policing the world; and policing everyday life. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2795 Capital Punishment (4 Credits)
This course examines three main topics: the history of capital punishment (facts and trends, public opinion, legislation, and landmark Supreme Court cases); arguments often made for abolition (arbitrariness, cost, and innocence); and arguments often made for retention (deterrence, incapacitation, and retribution). Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2800 Sociology of Sport (4 Credits)
Locating contemporary sport within context of history of work and leisure to explore sociological forces that have shaped the way we work and play; emphasis on how sport fits into the American culture; aspects such as race, gender, class, intercollegiate athletics, socialization, professionalization, economics, politics and social change. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2820 Drugs and Society (4 Credits)
Relationship between drug use, drug control and social contexts; various sociological themes relating to use and control of drugs in American society. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2830 White-Collar Crime (4 Credits)
Organization and control of white-collar crime, including fraud, corruption, price fixing, embezzlement, regulatory violations and other crimes committed by high-status individuals for and against organizations. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2850 Sociology of Poverty (4 Credits)
Causes, incidence and consequences of poverty; the various "pockets" of poverty: aged, urban, ethnic minorities, women; exploration of poverty in the U.S. and cross-culturally. Prerequisite: SOCI 1810 or permission of instructor.
SOCI 2855 Crime and the Media (4 Credits)
This course explores the complex relationship between crime and the media. We use sociological and cultural theories to examine how crime, criminals, and the criminal justice system are portrayed in print and visual media outlets. We explore the media’s role in shaping crime control and other public policies. We investigate the influence of offender and victim characteristics (e.g., race, gender, class, celebrity status) on how crime is presented. We also “turn the tables” to learn about how media itself may influence patterns of criminal offending (think violent video games). The overarching goal of this class is to teach students to watch/read crime media with an educated, critical eye. Prerequisite: SOCI 1810 or permission of instructor.

SOCI 2900 Methods of Social Research (4 Credits)
Relationship between theory and data, experimental and survey design, other techniques of controlling variables, constructing and evaluating scales, use of questionnaires and other research instruments, the logic of data analysis. Required for majors. Prerequisite: SOCI 1810.

SOCI 2992 Directed Study (1-10 Credits)

SOCI 3701 Topics in Sociology (4 Credits)
Topics vary. Recent topics have included criminal justice policy; qualitative methods and data analysis; environmental governance; advanced ethnographic methods; community values. Prerequisites: junior or senior standing and permission of instructor.

SOCI 3981 Internship (1-4 Credits)
Opportunity to gain valuable work experience, explore various career options, develop job competencies and apply theoretical knowledge to practical concerns of the world. Must have junior or senior standing, be sociology or criminology major or minor, have a cumulative GPA of 3.0, and have taken at least three sociology- and/or criminology-related courses beyond SOCI 1810.

SOCI 3982 Internship (1-4 Credits)
Opportunity to gain valuable work experience, explore various career options, develop job competencies and apply theoretical knowledge to practical concerns of the world. Must have junior or senior standing, be sociology or criminology major or minor, have a cumulative GPA of 3.0, and have taken at least three sociology- and/or criminology-related courses beyond SOCI 1810.

SOCI 3985 Thesis Research Seminar (2 Credits)
This course is designed to provide support and structure for students working on their senior thesis. The course assumes that students have completed a methods sequence, have chosen a thesis topic, and have a plan for how they will develop their thesis. Prerequisites: SOCI 2005 and SOCI 2006; permission of the instructor.

SOCI 3986 Thesis Writing Seminar (2 Credits)
This course is designed to provide continued support and structure for students working on their senior thesis. The class helps students with the structure of writing and defending their thesis. The course presumes that students have begun their projects, are significantly or nearly finished with data collection and organization, and are ready for analysis and writing. Prerequisites: SOCI 2005, SOCI 2006 and SOCI 3985; permission of the instructor.

SOCI 3991 Independent Study (1-8 Credits)

SOCI 3992 Directed Study (1-10 Credits)

SOCI 3998 Criminology Assessment (0 Credits)
This course involves a required assessment of graduating sociology and criminology majors' knowledge of the discipline based on courses taken. Prerequisites: SOCI 1810, SOCI 2005, SOCI 2006, SOCI 2020, and SOCI 2250; permission of instructor.

SOCI 3999 Sociology Assessment (0 Credits)
This course involves a required assessment of graduating sociology and criminology majors’ knowledge of the discipline based on courses taken. Prerequisites: SOCI 1810, SOCI 2005, SOCI 2006, SOCI 2020, and SOCI 2420; permission of instructor.

Sustainability
Office: Boettcher Center West Room 241
Mail Code: 2050 E. Iliff Ave. Denver, CO 80208
Phone: 303-871-3977
Email: Hillary.Hamann@du.edu
Web Site: http://www.du.edu/nsm/departments/geography/degreeprograms/undergraduateprograms/minors/minorinsustainability

Sustainability is a concept that is becoming increasingly important as human societies recognize the finite nature of many natural resources and the lingering ill effects of overconsumption, pollution and poorly planned land uses. Sustainability is defined as meeting the needs of the current generation without compromising the ability of future generations to meet their own needs and to do so while maintaining ecological processes, functions, biodiversity and productivity into the future. An understanding of sustainability includes the scientific basis for sustainable resource use as well as the social and economic implications and/or costs of sustainable practices. Given the state of the global economy, the social unrest that is building throughout many parts of the world, the ultimate dependence of both developed and developing nations on an increasingly stressed natural environment, and the connections between these, moving toward a sustainable future requires an interdisciplinary perspective of the challenges facing society today.
# Sustainability

## Minor Requirements

Minimum of 24 credits as follows:

### Gateway Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2500</td>
<td>Sustainability &amp; Human Society</td>
</tr>
</tbody>
</table>

### Elective Lens Courses

16 elective credits, including at least one course from each of the three "lens" categories: Natural & Physical Sciences; Social Sciences; and Arts & Humanities.

#### Natural/Physical Science Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2010</td>
<td>General Ecology</td>
</tr>
<tr>
<td>BIOL 2050</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>BIOL 3020</td>
<td>Aquatic Ecology</td>
</tr>
<tr>
<td>BIOL 3030</td>
<td>Alpine Ecology</td>
</tr>
<tr>
<td>BIOL 3035</td>
<td>Invasive Species Ecology</td>
</tr>
<tr>
<td>BIOL 3055</td>
<td>Ecology of the Rockies</td>
</tr>
<tr>
<td>BIOL 3060</td>
<td>Tropical Ecology</td>
</tr>
<tr>
<td>BIOL 3070</td>
<td>Ecological Field Methods</td>
</tr>
<tr>
<td>BIOL 3095</td>
<td>Global Change Ecology</td>
</tr>
<tr>
<td>BIOL 3044</td>
<td>Coral Reef Ecology</td>
</tr>
<tr>
<td>CHEM 2240</td>
<td>Introduction to Environmental Chemistry</td>
</tr>
<tr>
<td>CHEM 3410</td>
<td>Atmospheric Chemistry</td>
</tr>
<tr>
<td>CHEM 3412</td>
<td>Environmental Chemistry &amp; Toxicology</td>
</tr>
<tr>
<td>EALC 2001</td>
<td>Environmental Sustainability: Local and Regional Environmental Issues (LLC; restricted)</td>
</tr>
<tr>
<td>EALC 2002</td>
<td>Environmental Sustainability: The Impact of Development on the Environment (LLC; restricted)</td>
</tr>
<tr>
<td>EALC 2003</td>
<td>Environmental Sustainability: Energy in American Society (LLC; restricted)</td>
</tr>
<tr>
<td>ENVI 2801</td>
<td>Water Quality of Western Rivers and Streams</td>
</tr>
<tr>
<td>GEOG 2700</td>
<td>Contemporary Environmental Issues</td>
</tr>
<tr>
<td>GEOG 2608</td>
<td>Human Dimensions of Global Change</td>
</tr>
<tr>
<td>GEOG 3610</td>
<td>Climatology</td>
</tr>
<tr>
<td>GEOG 3640</td>
<td>Climate Change and Society</td>
</tr>
<tr>
<td>GEOG 3700</td>
<td>Environment &amp; Development</td>
</tr>
<tr>
<td>GEOG 3720</td>
<td>Mountain Environments and Sustainability</td>
</tr>
<tr>
<td>GEOG 3800</td>
<td>Geography of Colorado</td>
</tr>
<tr>
<td>GEOG 3830</td>
<td>Natural Resource Analysis &amp; Planning</td>
</tr>
<tr>
<td>GEOG 3870</td>
<td>Water Resources &amp; Sustainability</td>
</tr>
<tr>
<td>GEOG 2320</td>
<td>Andean Landscapes (Inter-term travel course)</td>
</tr>
<tr>
<td>GEOG 3880</td>
<td>Cleantech and Sustainability</td>
</tr>
<tr>
<td>GEOL 3100</td>
<td>Environmental Geology</td>
</tr>
</tbody>
</table>

#### Social Sciences & Korbel Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3040</td>
<td>Anthropologies of Place</td>
</tr>
<tr>
<td>ANTH 3310</td>
<td>Indigenous Environment</td>
</tr>
<tr>
<td>ANTH 3500</td>
<td>Culture and The City</td>
</tr>
<tr>
<td>ANTH 3880</td>
<td>Culture, Ecology, Adaptation</td>
</tr>
<tr>
<td>ECON 3970</td>
<td>Environmental Economics</td>
</tr>
<tr>
<td>ENVI 3000</td>
<td>Environmental Law</td>
</tr>
<tr>
<td>GEOG 2401</td>
<td>The Human Population</td>
</tr>
<tr>
<td>GEOG 2410</td>
<td>Economic Geography</td>
</tr>
<tr>
<td>GEOG 2420</td>
<td>Geography of Tourism</td>
</tr>
<tr>
<td>GEOG 2430</td>
<td>World Cities</td>
</tr>
<tr>
<td>GEOG 3310</td>
<td>Culture/Nature/Economics-Human Ecology</td>
</tr>
</tbody>
</table>

**Total Credits:** 24
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3340</td>
<td>Geographies of Migration</td>
</tr>
<tr>
<td>GEOG 3400</td>
<td>Urban Landscapes</td>
</tr>
<tr>
<td>GEOG 3420</td>
<td>Urban and Regional Planning</td>
</tr>
<tr>
<td>GEOG 3425</td>
<td>Urban Sustainability</td>
</tr>
<tr>
<td>GEOG 3440</td>
<td>Urban Transportation Planning</td>
</tr>
<tr>
<td>GEOG 3445</td>
<td>Sustainability and Transportation</td>
</tr>
<tr>
<td>GEOG 3730</td>
<td>International Environmental Policy</td>
</tr>
<tr>
<td>GEOG 3740</td>
<td>Environmental Justice in the City</td>
</tr>
<tr>
<td>GEOG 3890</td>
<td>Ecological Economics</td>
</tr>
<tr>
<td>INTS 2270</td>
<td>Sustainable Energy</td>
</tr>
<tr>
<td>INTS 2380</td>
<td>Comparative Development Strategies</td>
</tr>
<tr>
<td>INTS 3630</td>
<td>Global Environment</td>
</tr>
<tr>
<td>PLSC 2840</td>
<td>International Law &amp; Human Rights</td>
</tr>
</tbody>
</table>

**Arts & Humanities Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 3850</td>
<td>Art and the History of Science</td>
</tr>
<tr>
<td>COMN 2115</td>
<td>Performance &amp; Social Change</td>
</tr>
<tr>
<td>COMN 3701</td>
<td>Topics in Communication (Communications and Climate Change)</td>
</tr>
<tr>
<td>EDPX 3200</td>
<td>Data Visualization</td>
</tr>
<tr>
<td>EDPX 3350</td>
<td>Sustainable Design</td>
</tr>
<tr>
<td>EDPX 3700</td>
<td>Topics in Emergent Digital Culture (Bi media)</td>
</tr>
<tr>
<td>EDPX 3725</td>
<td>Activist Media</td>
</tr>
<tr>
<td>ENGL 2708</td>
<td>Topics in English (Native American and Aboriginal Land in Literature; Images of the Apocalypse in Literature and Film)</td>
</tr>
<tr>
<td>ENGL 2715</td>
<td>Native American Literature</td>
</tr>
<tr>
<td>HIST 2710</td>
<td>From Sea to Shining Sea: Nature in American History to 1900</td>
</tr>
<tr>
<td>HIST 2720</td>
<td>Paved Paradise? Nature and History in Modern America</td>
</tr>
<tr>
<td>MFJS 3261</td>
<td>Green Screen: Cases and Concepts in Environmental Filmmaking</td>
</tr>
<tr>
<td>PHIL 2180</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHIL 2785</td>
<td>Environmental Ethics</td>
</tr>
</tbody>
</table>

Additional elective credits may come from any lens category or other approved electives.  

**Other Approved Courses + Internships**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRTM 3700</td>
<td>Topics in Hospitality Mgmt (Sustainability and Entrepreneurship)</td>
</tr>
<tr>
<td>LDRS 2400</td>
<td>Ldrshp &amp; Sustnblty in Belize (Inter-term travel course)</td>
</tr>
<tr>
<td>MGMT 3100</td>
<td>Business Ethics and Social Responsibility</td>
</tr>
<tr>
<td>SJUS 2010</td>
<td>Social Justice: Exploring Oppression (LLC; restricted)</td>
</tr>
</tbody>
</table>

**Capstone Seminar**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2550</td>
<td>Current Issues in Sustainability (topics vary by instructor)</td>
</tr>
</tbody>
</table>

**Total Credits**

24

1. Topics courses must have Sustainability Attribute.
2. Additional courses including topics courses, study abroad courses, independent studies, and internships may be approved for elective credit on a case by case basis by the Sustainability Minor Advisor.

**Department of Theatre**

Office: Johnson McFarlane Hall  
Mail Code: 1903 E. Iliff Ave. Denver, CO 80208  
Phone: 303-871-2518  
Email: theatre@du.edu  
Web Site: http://www.du.edu/ahss/theatre
An artistic home where students expand their perspectives

Students who take classes in the Department of Theatre become part of a close-knit community engaged in every aspect of theatre. DU theatre majors do it all: write, design, build, act, direct, manage and produce. Our hands-on approach gives students a broad perspective—one that will help them develop creative problem-solving skills to take with them into their careers.

Engaged faculty

We credit the success of our program largely to our highly engaged faculty members. When not teaching or in production here on campus, many collaborate with a variety of local, regional and national theatre companies.

A hands-on experience

There are many ways to learn theatre at DU—in class, in rehearsal, on stage and backstage. Our students are the heart of the program, providing the actors, technicians and publicity for each production.

Intensive study

Students begin by developing a solid foundation in all the aspects of theatre and can focus on one area of emphasis in their third or fourth year—anything from performance to design to management to directing.

Theatre

Bachelor of Arts Major Requirements

(183 credits required for the degree) (p. 38)

Minimum of 45 credits to include the following:

<table>
<thead>
<tr>
<th>First-year priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1861 Theatre Imagination</td>
</tr>
<tr>
<td>THEA 1862 How to Read a Play</td>
</tr>
<tr>
<td>THEA 1200 Tech Studio &amp; THEA 1300 and Costume Studio</td>
</tr>
<tr>
<td>THEA 1400 Production Performance Studio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acting</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 2870 Acting I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>THEA 2880 Scene Design I</td>
</tr>
<tr>
<td>THEA 2881 Lighting Design I</td>
</tr>
<tr>
<td>THEA 2882 Costume Design I</td>
</tr>
<tr>
<td>THEA 2883 Sound Design I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directing</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 2885 Directing I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>THEA 3760 Stage Management</td>
</tr>
<tr>
<td>THEA 2884 Production Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>THEA 2890 Theatre History I</td>
</tr>
<tr>
<td>THEA 2891 Theatre History II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Capstone Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 3861 Junior Seminar</td>
</tr>
<tr>
<td>THEA 3862 Practicum in Theatre</td>
</tr>
</tbody>
</table>

Electives
8 additional THEA credits of the student's choosing (2000 level or higher) 8

Total Credits 45

1 Combined total five quarters required THEA 1200 and THEA 1300 Costume Studio
2 Five quarters required; two must be a crew position
3 Enrollment in three sections of THEA 3862 Practicum in Theatre is required

Secondary Major Requirements

45 credits. Same requirements as for BA degree.

Minor Requirements

Minimum of 24 credits to include the following:

Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1861</td>
<td>Theatre Imagination</td>
<td>4</td>
</tr>
<tr>
<td>THEA 1862</td>
<td>How to Read a Play</td>
<td>4</td>
</tr>
<tr>
<td>THEA 1200</td>
<td>Tech Studio</td>
<td>1</td>
</tr>
<tr>
<td>THEA 1300</td>
<td>Costume Studio</td>
<td>1</td>
</tr>
<tr>
<td>THEA 1400</td>
<td>Production Performance Studio</td>
<td>0</td>
</tr>
</tbody>
</table>

Electives

14 additional THEA credits of the student's choosing (at least 5 of the 14 must be 2000 level or higher) 14

Total Credits 24

1 Three quarters required; one must be a crew position

Courses

THEA 1010 Stage Movement & Dance (1 Credit)
Movement class for dancers and non-dancers alike. Topics may include Stage Combat, Broadway, Period Movement, Tai Chi, Masks & Storytelling, World Dance Styles, Movement Analysis, etc. Check with department for quarterly offerings.

THEA 1011 Stage Movement & Dance (1 Credit)
Movement class for dancers and non-dancers alike. Topics may include Stage Combat, Broadway, Period Movement, Tai Chi, Masks & Storytelling, World Dance Styles, Movement Analysis, etc. Check with department for quarterly offerings.

THEA 1012 Stage Movement & Dance (1 Credit)
Movement class for dancers and non-dancers alike. Topics may include: Stage Combat, Broadway, Period Movement, Tai Chi, Masks & Storytelling, World Dance Styles, Movement Analysis, etc. Check with Department for quarterly offerings.

THEA 1200 Tech Studio (1 Credit)
Tech studio is a basic course in the principles of scenic construction and preparation for department productions: hands-on training and application of technical theatre skills. Includes scenic construction, properties crafts, sound engineering, lighting electrics, scene painting, and related theatrical design elements, as defined by the needs of the departmental production season. Special emphasis on developing core competencies within a framework of professionally-modeled safety protocols.

THEA 1300 Costume Studio (1 Credit)
Costume Studio is a basic course in the principles of costume construction and preparation for department productions: hands-on training and application of costume building skills. Includes sewing, patterning, draping, tailoring, dyeing, maintenance/upkeep, and related skills necessary to the successful realization of the costume design process within the context of the departmental production season. Special emphasis on developing core competencies within a framework of professionally-modeled safety protocols.

THEA 1400 Production Performance Studio (0 Credits)
Production Performance Studio is a course that provides hands-on training and application of acting and/or production performance skills. Includes acting, stage management, directing, designing, light/sound board operations, stage crew, wardrobe, and related roles in the production and performance process, applied within the context of departmental productions. Builds upon the foundation provided by departmental courses. Audition and/or faculty permission required for enrollment.

THEA 1810 The Process of Theatre: Page to Stage (4 Credits)
Exploration of the process playwrights, directors, actors, and designers use in creating a theatrical production. Individual sections may focus on single areas only—please see department for current offerings. In this course, students will demonstrate the ability to create or interpret the texts, ideas or artifacts of human culture. They will also identify and analyze the connections between these things and the human experience/perception of the world. This course counts toward the Analytical Inquiry: Society and Culture requirement.
THEA 1861 Theatre Imagination (4 Credits)
Beginning exploration of nature of theatricality through exercises and study of specific plays; explore acting, directing, designing and writing. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 1862 How to Read a Play (4 Credits)
Close analysis of selected dramatic texts from Aeschylus to Caryl Churchill. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 1992 Directed Study (1-10 Credits)

THEA 2200 Voice for the Actor (1 Credit)
Exploration and application of foundational vocal techniques for stage actors.

THEA 2220 Shakespeare Plays in London (4-4.5 Credits)
Cross listed with ENGL 2536.

THEA 2861 Theatre Imagination II (3 Credits)
The purpose of this class is to identify personal barriers to creativity and learning, and to identify ways to eliminate them. Class work will include exercises focusing on relaxation, intuition, conscious problems solving techniques, and performance skills. Out of class work will include creative exercises and rehearsals. The class will culminate in a final public performance.

THEA 2870 Acting I (4 Credits)
Exploration of acting through physical and vocal exercises, followed by scene study. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 2871 Acting I (4 Credits)
Exploration of acting through physical and vocal exercises, followed by scene study.

THEA 2880 Scene Design I (4 Credits)
Exploration of methods, techniques and procedures involved in transforming scenic concepts into actual practice. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 2881 Lighting Design I (4 Credits)
Exploration of methods, techniques and procedures involved in transforming lighting concepts into actual practice. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 2882 Costume Design I (4 Credits)
Exploration of methods, techniques and procedures involved in transforming costume concepts into actual practice.

THEA 2883 Sound Design I (4 Credits)
Exploring methods, techniques and procedures involved in transforming sound effects/sound design into actual practice.

THEA 2884 Production Management (4 Credits)
Exploration of core competencies, their development and application throughout the collaborative theatrical production process, with the explicit goal of ensuring the successful execution of an artistic vision within the resources of a producing organization.

THEA 2885 Directing I (4 Credits)
Theory and practice of staging plays.

THEA 2890 Theatre History I (4 Credits)
This course examines the development of Western theatre and drama from the Ancient Greeks to the 19th-Century, concentrating on the intellectual, social and artistic foundations of theatre and drama. The course is designed to engage theatre from its theatrical, social, cultural, and historical contexts. The lecture-discussion format of this course is intended to foster an active engagement among the students with the theatre and drama of the past. Through in-class readings, discussions of the readings, written assignments, and presentations, students are encouraged to consider the material under investigation from sociohistorical and theatrical perspectives, as well as from the material's relation and relevance to the present. The focus is on theatre and drama representative of the major styles, authors, and genres from Fifth-Century B.C.E. into the early 19th-Century. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 2891 Theatre History II (4 Credits)
This course examines the development of Western theatre and drama from the 19th-Century to the present. Concentrating on the intellectual, social and artistic foundations of theatre and drama, this course is designed to engage theatre from its theatrical, social, cultural, and historical contexts. The lecture-discussion format of this course is intended to foster an active engagement among students with the theatre and drama of the past. Through in-class readings, discussions of the readings, written assignments, and presentations, students are encouraged to consider the material under investigation from sociohistorical and theatrical perspectives, as well as from the material's relation and relevance to the present. The focus is on theatre and drama representative of the major styles, authors, and genres from the 19th-Century to the present. This course counts toward the Analytical Inquiry: Society and Culture requirement.

THEA 2992 Directed Study (1-10 Credits)

THEA 3603 Theatre History: The Modern Theatre (4 Credits)
Survey of performance conventions and critical theory (20th century).
THEA 3700 Topics in Theatre (1-4 Credits)
THEA 3701 Topics in Theatre (1-4 Credits)
THEA 3702 Topics in Theatre (1-4 Credits)
THEA 3703 Topics in Theatre (1-4 Credits)
THEA 3704 Topics in Theatre (1-4 Credits)
THEA 3711 Playwriting (4 Credits)
Introductory course designed to provide students with the necessary tools to create dramatic texts for reading and performance. Through textbook and published play reading assignments engineered to highlight successful practices, and exercises devised to tap into different modes of creative generation, students will discover different methodologies for developing new work for the stage.
THEA 3760 Stage Management (4 Credits)
Survey, exploration, and application of the component parts of the stage manager’s role, based upon current methods practiced by professional theatre companies in the United States. Stage managers facilitate the creation of a fully-realized work of theatrical art, born of the collaboration of numerous artists, craftspeople and technicians.
THEA 3861 Junior Seminar (1 Credit)
Roundtable discussions of play-selection, production requirements and creative strategies taken the year prior to the Senior Practicum Project (THEA 3862). Additionally, students will consider their post-graduation goals and receive practical advice on advanced studies or a career in the theatre.
THEA 3862 Practicum in Theatre (1 Credit)
Senior capstone project synthesizing all aspects of the BA program. As a “principal artist” (actor, director, designer, playwright, etc.) on a production of the student’s choosing, each graduating senior will be given the chance to put “theory into practice” and fully mount a play for an audience.
THEA 3865 Seminar in Dramatic Literature (4 Credits)
Selected problems and periods.
THEA 3870 Acting II (4 Credits)
Continuing exploration of acting through text analysis, scansion, vocal technique and scene presentation.
THEA 3872 Acting II (4 Credits)
Continuing exploration of acting through text analysis, scansion, vocal technique and scene presentation.
THEA 3873 Acting III (4 Credits)
Advanced exploration of acting through scene study, intense physical and vocal work and rehearsal techniques.
THEA 3880 Scene Design II (3 Credits)
Analytical and creative problems in scenic design under a variety of theatrical conditions.
THEA 3881 Lighting Design II (3 Credits)
Analytical and creative problems in lighting design under a variety of theatrical conditions.
THEA 3882 Costume Design II (1-3 Credits)
Analytical and creative problems in costume design under a variety of theatrical conditions.
THEA 3883 Stage Makeup (2 Credits)
Hands-on instruction in application and design of theatrical makeup.
THEA 3884 Scene Painting (4 Credits)
Exploration of two- and three-dimensional techniques for painting stage scenery.
THEA 3885 Directing II (3 Credits)
Intermediate course that builds upon the foundation of Directing I. This course offers a challenging, hands-on approach to understanding, integrating and demonstrating the skills required for the confident practice of the director’s craft. Prerequisite: THEA 2885.
THEA 3980 Theatre Internship (1-12 Credits)
Internships in theatre include everything from front of house jobs to acting on stage. Internships can be for any entertainment related field and include theme parks, cruise ships and regional theatres.
THEA 3991 Independent Study (1-10 Credits)
In-depth exploration of a specific topic or project of the student’s choosing, undertaken in consultation with and under the close supervision of a faculty advisor. These courses may also be taken in preparation for an honor’s thesis in any theatrical discipline.
THEA 3992 Directed Study (1-10 Credits)

Urban Studies

Office: Sturm Hall, Room S105
Mail Code: 2000 E. Asbury Ave. Denver, CO 80208
Phone: 303-871-2680
Email: dsaitta@du.edu
Urban Studies

Minor Requirements

24 credits, to include one course each from six of the following seven urban studies disciplines:

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anthropology</strong></td>
<td>ANTH 3500</td>
<td>Culture and The City</td>
<td>4</td>
</tr>
<tr>
<td><strong>Communication Studies</strong></td>
<td>COMN 1700</td>
<td>Fundamentals of Intercultural Communication</td>
<td>4</td>
</tr>
<tr>
<td>or COMN 3315</td>
<td></td>
<td>Public Deliberation</td>
<td></td>
</tr>
<tr>
<td>or COMN 3140</td>
<td></td>
<td>Advanced Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>or COMN 3142</td>
<td></td>
<td>Dialogue, Culture &amp; Conflict</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>CUI 3995</td>
<td>Urban Education</td>
<td>5</td>
</tr>
<tr>
<td>or CUI 3996</td>
<td></td>
<td>Urban Youth Development</td>
<td></td>
</tr>
<tr>
<td><strong>Geography</strong></td>
<td>GEOG 3400</td>
<td>Urban Landscapes</td>
<td>4</td>
</tr>
<tr>
<td>or GEOG 3420</td>
<td></td>
<td>Urban and Regional Planning</td>
<td></td>
</tr>
<tr>
<td>or GEOG 3440</td>
<td></td>
<td>Urban Transportation Planning</td>
<td></td>
</tr>
<tr>
<td><strong>History</strong></td>
<td>HIST 2701</td>
<td>Topics in History (History in the Community)</td>
<td>4</td>
</tr>
<tr>
<td>or HIST 3100</td>
<td></td>
<td>Cities and Society in Latin America</td>
<td></td>
</tr>
<tr>
<td>or HIST 3190</td>
<td></td>
<td>Immigrants in American History</td>
<td></td>
</tr>
<tr>
<td><strong>Political Science</strong></td>
<td>PLSC 1000</td>
<td>Introduction to American Politics</td>
<td>4</td>
</tr>
<tr>
<td>or PLSC 2470</td>
<td></td>
<td>State and Local Politics</td>
<td></td>
</tr>
<tr>
<td><strong>Sociology</strong></td>
<td>SOCI 2190</td>
<td>American Communities</td>
<td>4</td>
</tr>
<tr>
<td>or SOCI 2320</td>
<td></td>
<td>Race and Ethnic Relations</td>
<td></td>
</tr>
<tr>
<td>or SOCI 2420</td>
<td></td>
<td>Social Inequality</td>
<td></td>
</tr>
<tr>
<td>or SOCI 2500</td>
<td></td>
<td>Schooling and Society</td>
<td></td>
</tr>
</tbody>
</table>

Wellness Living and Learning Community

Office: Driscoll Student Center South, Suite 1
Mail Code: Mail Code: 2050 E. Evans Ave. Denver, CO 80208
Phone: 303-871-3554
Email: Brianna.Johnson@du.edu (Tay.Dunklee@du.edu)
Web Site: http://www.du.edu/livinglearning/wellness

The Wellness minor inspires students to explore and pursue the connection between emotional, physical, mental, spiritual, and community wellness. Students can pursue the Wellness minor without being part of the Wellness Living and Learning Community.

As an interdisciplinary minor, courses focus on wellness from the individual experience to the global perspective. Emphasis is placed on exploring wellness disparities and researching solutions to these issues. The minor involves opportunities to engage in wellness practices outside of the classroom. Additionally, each wellness minor is individually tailored to meet the academic needs of each student in relation to their major course of study.
Wellness

Minor Requirements

25 credits, including the following:

Six credits from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL 2013</td>
<td>Introduction to Wellness</td>
<td>2</td>
</tr>
<tr>
<td>WELL 2014</td>
<td>Community and Social Wellness</td>
<td>2</td>
</tr>
<tr>
<td>WELL 2015</td>
<td>Spiritual and Emotional Wellness</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS 2580</td>
<td>Spectator to Citizen: Community Organizing</td>
<td>2</td>
</tr>
<tr>
<td>or SS 2581</td>
<td>Spectator to Citizen: Denver Urban Issues and Policy</td>
<td></td>
</tr>
<tr>
<td>or SS 2582</td>
<td>Spectator to Citizen: School-Based Civic Engagement</td>
<td></td>
</tr>
</tbody>
</table>

Electives

Coursework selected with approval of student's minor advisor. Elective courses may include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3135</td>
<td>Feasting, Fasting and Food: The Anthropology of Food</td>
<td></td>
</tr>
<tr>
<td>ANTH 3500</td>
<td>Culture and The City</td>
<td></td>
</tr>
<tr>
<td>BIOL 3230</td>
<td>Nutrition</td>
<td></td>
</tr>
<tr>
<td>GWSU 2210</td>
<td>The Family</td>
<td></td>
</tr>
<tr>
<td>COMN 1012</td>
<td>Speaking on Ideas that Matter</td>
<td></td>
</tr>
<tr>
<td>COMN 1015</td>
<td>Voice and Gender</td>
<td></td>
</tr>
<tr>
<td>COMN 1100</td>
<td>Communication in Personal Relationships</td>
<td></td>
</tr>
<tr>
<td>COMN 1700</td>
<td>Fundamentals of Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>HED 3264</td>
<td>Psychosocial Dimensions of Sports and Wellness</td>
<td></td>
</tr>
<tr>
<td>INTS 2500</td>
<td>International Health and Development</td>
<td></td>
</tr>
<tr>
<td>PHIL 2100</td>
<td>Philosophy of Mind</td>
<td></td>
</tr>
<tr>
<td>PPSS 2100</td>
<td>Concepts of the Public Good</td>
<td></td>
</tr>
<tr>
<td>PSYC 1001</td>
<td>Foundations of Psychological Science</td>
<td></td>
</tr>
<tr>
<td>PSYC 2031</td>
<td>Introduction to Cognitive Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSYC 2070</td>
<td>Child and Lifespan Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 2109</td>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td>PSYC 2510</td>
<td>Personality</td>
<td></td>
</tr>
<tr>
<td>PSYC 2540</td>
<td>The Psychology of Couples Relationships: From Dating to Mating and Beyond</td>
<td></td>
</tr>
<tr>
<td>PSYC 3080</td>
<td>Drugs and Behavior</td>
<td></td>
</tr>
<tr>
<td>PSYC 3155</td>
<td>Motivation and Emotion</td>
<td></td>
</tr>
<tr>
<td>RLGS 2401</td>
<td>Social Justice in a Global Context: Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>RLGS 3350</td>
<td>Culture, Psyche, and Religion</td>
<td></td>
</tr>
<tr>
<td>RLGS 3740</td>
<td>Bodies and Souls</td>
<td></td>
</tr>
<tr>
<td>SOCI 1810</td>
<td>Understanding Social Life</td>
<td></td>
</tr>
<tr>
<td>SOCI 2060</td>
<td>Self and Society</td>
<td></td>
</tr>
<tr>
<td>SOCI 2240</td>
<td>Sociology of Health</td>
<td></td>
</tr>
<tr>
<td>SOCI 2730</td>
<td>Gender in Society</td>
<td></td>
</tr>
<tr>
<td>SOCI 2820</td>
<td>Drugs and Society</td>
<td></td>
</tr>
<tr>
<td>SOCI 2800</td>
<td>Sociology of Sport</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 25

Courses

**WELL 2013 Introduction to Wellness (1,2 Credit)**

This course is designed to help students critically analyze the determinants of wellness in the life cycle, across socio-economic boundaries and cultures, and to promote wellness in the everyday lives we lead both personally and as members of a community. An emphasis is placed on the research and application of knowledge and skills to increase personal awareness of health and to promote wellness in the quality of life in a community.
WELL 2014 Community and Social Wellness (1,2 Credit)
This course helps students explore their own perspectives and identities in terms of community and social wellness. Students explore different facets of the community from a development approach to analyze critically what determines the relationship between community wellness and social wellness across time, the life cycle, socio-economic boundaries, cultures and communities. There are both research and service components to the course. An emphasis is placed on informed discussion, working together, sensitivity to others’ perspectives, and creating greater awareness of our power to effect change in our community and our world.

WELL 2015 Spiritual and Emotional Wellness (1,2 Credit)
This course helps students explore their own perspectives and identities in terms of spirituality as it relates to personal wellness. The course creates opportunities for students to explore different spiritual experiences to analyze critically the relationship between spirituality and wellness across time, the life cycle, various socio-economic levels, cultures and communities. An emphasis is placed on informed discussion, sensitivity to others’ perspectives, and creating great awareness in our community.

University Writing Program

Office: Anderson Academic Commons, Room 282
Mail Code: 2150 E. Evans Ave. Denver, CO 80208
Phone: 303-871-7448
Email: writing@du.edu
Web Site: http://www.du.edu/writing

The University Writing Program is dedicated to developing writing abilities across the University for writers in academic, civic and professional situations. The program, grounded in the arts of rhetoric and the craft of writing, pursues these goals through five activities:

1. Required first-year writing courses
2. A robust Writing Center, which helps undergraduates and graduates with writing tasks from all disciplines, as well as personal and professional projects, through one-on-one consultations with well-trained consultants
3. Faculty and support through writing across the curriculum efforts (in such programs as writing-intensive advanced seminar courses and first-year seminars), through writing activities in specific departments or programs, and through consultations with individual faculty and classes
4. Research on writing, especially among undergraduate students.
5. Sponsoring a Minor in Writing Practices.

Writing Practices

Minor Requirements

The Minor in Writing Practices develops writing proficiencies at time when employers find writing abilities are vital, when writing shapes civic action, when writing fosters personal development and social interaction, when writing uses evolving technologies. The minor is open to all undergraduates who have successfully completed WRIT xx22 and xx33 and want to hone their writing, further understanding of writing concepts and theories, and demonstrate abilities to employers and others. Students will complete at least 20 credits of courses culminating in a formal portfolio of their work:

• WRIT 2000: Theories of Writing (4 credits)
• Two courses from a list of approved Applied Writing courses (8 credits)
• One course from a list of approved Theory, History, or Research in Writing courses (4 credits)
• WRIT 3500: Capstone: Writing Design and Circulation (4 credits)

Students select approved courses from several departments and programs, which offers flexibility and breadth.

<table>
<thead>
<tr>
<th>Introduction</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRIT 2000</td>
<td>Theories of Writing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theory, History, Research in Writing</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2020</td>
<td>Artifacts, Texts, Meaning</td>
</tr>
<tr>
<td>ANTH 3060</td>
<td>Cultural Narratives</td>
</tr>
<tr>
<td>COMN 2150</td>
<td>Rhetorical/Critical Communication Inquiry</td>
</tr>
<tr>
<td>COMN 2300</td>
<td>Fundamentals of Argumentation</td>
</tr>
<tr>
<td>COMN 2400</td>
<td>Landmarks in Rhetorical Theory</td>
</tr>
<tr>
<td>ENGL 2815</td>
<td>Studies in Rhetoric</td>
</tr>
<tr>
<td>ENGL 3815</td>
<td>Studies in Rhetoric</td>
</tr>
<tr>
<td>ENGL 3817</td>
<td>History of Rhetoric</td>
</tr>
<tr>
<td>ENGL 3818</td>
<td>Composition Theory</td>
</tr>
</tbody>
</table>
### Course Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPX 2200</td>
<td>Cultures in Emergent Digital Practices</td>
</tr>
<tr>
<td>MFJS 2100</td>
<td>Culture, Media and Power</td>
</tr>
<tr>
<td>WRIT 2500</td>
<td>Topics in Writing Theory, History, Research</td>
</tr>
</tbody>
</table>

#### Applied Writing (8 Credits)
- **BUS 3500** Business Communications I
- **ENGL 1000** Introduction to Creative Writing
- **ENGL 2001 & ENGL 2002 & ENGL 2003** Creative Writing-Poetry
- **ENGL 2010 & ENGL 2011 & ENGL 2012** Creative Writing-Fiction
- **ENGL 2021** Business Technical Writing
- **ENGL 2040** Introduction to Publishing
- **ENGL 3015 & ENGL 2001 & ENGL 2002** Creative Writing-Fiction
- **MFJS 2140** Newswriting & Reporting
- **THEA 3711** Playwriting
- **WRIT 2040** Memoir and Personal Writing
- **WRIT 2050** Style and Rhetorical Grammar
- **WRIT 2701** Topics in Applied Writing

#### Capstone (4 Credits)
- **WRIT 3500** Capstone: Writing Design and Circulation

#### Total Credits 20

### Courses

**WRIT 1122 Rhetoric and Academic Writing (4 Credits)**

On completing this course, students are expected to have enhanced the following knowledge and skills: analytic and critical reading strategies; a basic understanding of rhetorical situations and rhetorical analysis; the ability to write for specific audiences and discourse communities, using effective conversations for these situations; the ability to write texts that are organized, coherent and substantive, demonstrating rhetorical, linguistic design and analytical competence. The course provides instruction and practice in academic and civic writing for well-educated readers. Students complete at least 20 pages of revised and polished writing, in multiple assignments, as well as additional exercises. Final portfolio.

**WRIT 1133 Writing and Research (4 Credits)**

This course builds on the writing and rhetorical skills learned in WRIT 1122 by shifting attention from general rhetorical strategies to specific rhetorical strategies that shape different kinds of academic inquiry. Through introduction to quantitative, qualitative, and textual research traditions, students identify how written reasoning varies in terms of the questions posed, the kind of evidence used to answer them, and the nature of the audience or forum for the result. In addition, the course teaches how to shape research into substantive academic arguments, with attention to the ethical consequences of their rhetorical choices. Students are asked to develop further their linguistic, design, and reasoning competencies, with added consideration of citation conventions. Students complete at least 20 pages of revised and polished writing, in multiple assignments, as well as numerous additional exercises, in projects requiring library-based research as well as other types. Final portfolio. Prerequisite: WRIT 1122.

**WRIT 1622 Advanced Rhetoric and Writing (4 Credits)**

A writing course for advanced first-year students, emphasizing rhetorical strategies for different academic and civic audiences and purposes; critical reading and analysis; and research. Course sections focus on a coherent set of texts, usually on an issue or theme; contact the Writing Program for specific information each quarter. Students complete at least 20 pages of polished prose in multiple assignments. Final portfolio. Satisfies the same graduation requirement as WRIT 1122. Prerequisite (one of the following): Admission to honors program; score of three or better on AP Language and Composition or Language and Literature exams, or four on the IB English; or specific permission of the director of writing.

**WRIT 1633 Advanced Writing and Research (4 Credits)**

A continuation of WRIT 1622, this is a writing course for advanced first-year students, emphasizing rhetorical strategies for different academic and civic audiences and purposes; critical reading and analysis; and research. The course has a significant research component. Course sections focus on a coherent set of texts, usually on an issue or theme; contract the Writing Program for specific information each quarter. Students complete at least 20 pages of polished prose in multiple assignments. Final portfolio. Satisfies the same graduation requirement as WRIT 1133. Prerequisites: WRIT 1122 or 1622, plus one of the following: either admission to the honors program; score of three or better on AP Language and Composition or Language and Literature exams, or four on the IB English; or specific permission of the director of writing.
WRIT 1733 Honors Writing (4 Credits)
Honors Writing is designed for students who will benefit from a particularly rigorous and in-depth experience with language. This class offers a theme around which students read serious and challenging texts, including some primary readings in rhetorical theory, and write at least 25 pages of polished prose, with additional less formal writings. The course offers advanced instruction in rhetorical theory and practice, as well as writing in multiple research traditions in the academy. Class has a highly participatory discussion format and students will have latitude in choosing and directing much of their work. Topics vary from section to section. Required for honors students. Prerequisites: admission to the honors program and either WRIT 1622 or WRIT 1122; or permission of the director of writing, in consultation with the director of honors.

WRIT 1991 Independent Study (1-4 Credits)
WRIT 1992 Directed Study (4 Credits)

WRIT 2000 Theories of Writing (4 Credits)
This course introduces a number of theories of writing, providing an overview of complex issues and research into the state and status of writing and writers. It takes up such questions as these: What is writing? Where did it come from? How did it develop—and did it do so the same or differently in other cultures? How do writers develop—and what accounts for differences? What are different types of writing, different situations for writing, different tools and practices—and how do these interconnect? What does it mean to study writing? How have major figures theorized writing, and what tensions emerge among their theories? What are relationships among thought, speech, and writing—and among image, film/video, and sound? How do such theories change our notions of what texts are and what texts do? Students will learn various theorists, historians, and researchers answer these questions, and they will apply that knowledge to their own projects. Prerequisites: WRIT 1133.

WRIT 2040 Memoir and Personal Writing (2,4 Credits)
In learning to write memoir, a writer is learning how to analyze memory, select experiences, invent narratives—all while still being "truthful." In this course, students distinguish memoir from other forms of writing about the self, including autobiography, diaries and journals, blogs, and letters. They read excerpts of published memoirs and drafts of memoirs they write during the course, with a particular interest in how these writers shape and represent their experiences textually: how do people construct the stories they tell about their lives? What is the value of personal writing for writers and readers? And perhaps most importantly, how can we begin to create stories of experiences in compelling ways? Students complete multiple writing projects, including at least one polished short memoir.

WRIT 2050 Style and Rhetorical Grammar (2,4 Credits)
Be concise. Don't split infinitives. Write with flow. Don't end a sentence with a preposition. Avoid the passive voice. Never use "I" in academic writing." Everyone has these maxims about writing and grammar. This course will interrogate those maxims, and provide systematic ways to draft, revise, and polish prose based on the needs and demands of the audience. More specifically, students consider matters of sentence structure and sentence rhythm, cohesion and concision, as well as voice and point of view. Through a series of shorter and longer writing assignments, in-class exercises and activities, and course readings, students hone their writing and grammar skills, all with the goal of writing with improved clarity and grace. The course is open to all students who want to take their writing to a next level of sophistication, clarity, and range. Prerequisite: WRIT 1122 or permission of instructor.

WRIT 2500 Topics in Writing Theory, History, Research (4 Credits)
This course provides curricular space for various subjects and foci related to theories about writing, histories of writing and its status and development, or research about writing. Specific offerings of the course will vary according to professor or student needs, interests, and opportunities, and to developing knowledge and research in the field. Examples of possible topics might include multimodality and writing, relationships between visual and verbal rhetoric, the development of specific genres over time, the relationship between academic and civic writing, the history of writing in specific schools or settings, research into the acquisition of writing skills, social policies and practices that affect writing, ethical issues in writing practices, the effects of technologies on writing, and so on. The preceding list is illustrative, not exclusive. Prerequisites: WRIT 1133.

WRIT 2701 Topics in Applied Writing (4 Credits)
Individual offerings of this course teach skills and strategies for writing in a specific professional or public context or for improving in a specific type of writing. The focus is on the texts, genres, conventions, habits, and critical questions salient to writers in a given situation. Each offering will focus on a topic not available in existing courses. Possible examples include: "Writing for the Public Good," "Publications Editing," "Writing, Curation, and the Archive," "Writing (in) the Workplace," "Writing Profiles and Biographies," "Nature Writing," and so on. (The previous list is merely suggestive.) Benefitting the course, the primary writing focus will be on producing texts for/within the topical focus, with emphasis on drafting, revision, and design. Students will also write responses to and analyses of assigned readings (including the work of other students). Prerequisites: WRIT 1133 or permission of the Executive Director of Writing.

WRIT 3500 Capstone: Writing Design and Circulation (4 Credits)
The primary goal of this capstone course for the Minor in Writing Practices is to create and present a professional electronic/web-based portfolio synthesizing university writing experiences. The portfolio showcases and offers reflective insight into a student's writings, demonstrating the writer's ability to navigate diverse rhetorical situations. Students will learn theories and practices for selecting, arranging, and circulating/publishing written work, culmination in a required portfolio that synthesizes their university writing experiences. In addition to practicing principles of editing and design, students will produce a substantive revision of a previous piece of their own writing and composit a theory of writing that synthesizes analyses of their practices with published scholarship and research. The course covers design considerations and strategies and offers studio time for peer and instructor feedback. It culminates with a public showcase. Prerequisites: WRIT 2500 and completion of at least two other courses in the Writing Practices minor.
University College Bachelor of Arts Completion Program

Most majors, and some minors, may only be pursued in conjunction with specific degree programs. The Degrees and Programs of Study (p. 24) section of this bulletin lists possible degree and major/minor combinations. Students must meet overall requirements for their degree as well as specific requirements outlined in majors and minors.

Common Learning Experience

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St., Denver, CO 80208
Phone: 303-871-2291, 800-347-2042
Email: ucolsupport@du.edu
Web Site: http://www.universitycollege.du.edu

The Common Learning curriculum includes ten carefully selected courses in five areas where we believe students can sharpen their skills and develop the understanding of essential knowledge needed for thriving in the information age. These are not 101 courses, but instead a set of interdisciplin ary courses for people who have been in the working world and are highly motivated. Interdisciplinary simply means that the perspectives and materials of several disciplines have been brought together in the design of each course. Because all students in the program will take these courses, they will have a common foundational experience so instructors in advanced courses can assume what all students can do. The Common Learning Experience will help students learn how to learn, so they can go on to learn anything they want or need to know.

Communication Arts Courses

CA 2050 Effective Communication (4 Credits)
Communication is at the heart of organizations, society, and personal life. This course cultivates an awareness of several key aspects of communication: making a well-reasoned argument, locating and using supporting evidence, speaking or writing persuasively, and using appropriate language and visual support. Communicating with different audiences, crafting well organized presentations, and using various media to express one's ideas and feelings creatively are the major focus of this course.

CA 2100 Creativity and Innovation (4 Credits)
Everyone has a creative core. It can become hidden or lost, but the ability to recognize one's creative source and tap into it at will provides an increased range of communication options. This course focuses on defining creativity and innovation, de-mystifying creativity and learning to cultivate creativity and innovation. We use the "whole brain" approach while learning about the current research showing the neurological pathways of creativity and practice accessing and stimulating these pathways. A critical aspect of this exploration is learning how to keep a mixed media journal and playing with expression that combines both text and visual elements. Students are challenged to solve problems, take risks, and look at themselves and their creative energies in new ways. The experiences and activities of this course build skills and confidence in using one's creativity and innovative thought.

CA 3050 Media and Society (4 Credits)
This course provides a critical examination of media forms and their impact on society. The representation of culture through print media (books, magazines, newspapers, and online media) and through various visual media (film, television, Internet) is explored. Students learn how informational, entertainment, literary, and commercial messages are crafted and transmitted. The focus is on messages, the institutions behind the messages, and their impact on society.

CA 3100 Cross-Cultural Communication (4 Credits)
In an increasingly global society and a world or growing international interaction, communicating effectively with people of different cultural and ethnic backgrounds becomes a challenge but also an opportunity. The ability to accept and transcend differences has personal and professional transformative powers. This course explores a range of communication concepts and theories such as cultural competency, identity theory salience, and the nature of prejudice and its impact on communication. Students have the opportunity to develop and practice skills and abilities that enhance sincere, sensitive, and effective communication across differences.

CA 3150 Effective Presentations (4 Credits)
Researching and refining ideas and then representing them effectively is an indispensable skill. This course focuses on crafting effective written and spoken presentations that employ appropriate organizational, visual, and physical elements. Students have opportunities to select visual elements such as images, graphs, and charts; to address physical considerations such as voice, gesture, and body language; and to relate text, movement, and visuals in effective professional presentations. Students become familiar with and be able to use PowerPoint, In-Design, and Photoshop in crafting and supporting presentations.

CA 3200 Art and Interpretation (4 Credits)
This course examines ways in which meaning is made and communicated through visual imagery. Students learn how to describe, analyze, and interpret visual information, using abundant examples from everyday life, such as photographs, comic books, graffiti, home furnishings, advertisements, buildings, and public art displays. In considering this array of creative effort, students address the difficult question: Is it Art? This course focuses on expanding skills in visual interpretation and developing and using aesthetic standards.
CA 3250 How the Body Talks (4 Credits)
How does body movement reveal or conceal true intent? Humans appear to be “hard-wired” to assess, examine, and respond to the physical language of others. Although this process is often automatic or unconscious, people can learn to identify and employ the elements of physical rhetoric (posture, stance, bearing, expression, and gait) in conscious ways to persuade others. If acting is the “truthful” revelation of character, what can be learned through proven performance techniques to enhance one’s presentation of self in varied settings? This course helps students to become more informed readers of physical signs in others, more aware of their own habitual physical tendencies, and more able to present themselves authentically to others.

CA 3300 Creating Dialogue (4 Credits)
What happens when people speak, listen, and respond? Dialogue can occur between two or three people, in a group, across groups, and within and across organizations and communities. This course focuses on deliberative discussion: how to build and enhance dialogue, and how to repair it when it breaks down. Skills in both participation and facilitation are developed as well as strategies for resolving conflict. The goal of the course is to help students develop skills needed for productive and civil conversation in multiple settings.

Leadership Org Studies Courses

LOS 2050 Organizational Behavior (4 Credits)
Organizations serve as the fundamental building blocks of society. Most people spend a considerable number of hours each week working in or relating to organizations. This course provides opportunities to learn about organizational structures and development, the dynamics of individual behavior within organizations, and how organizations foster and manage change.

LOS 2100 Leadership (4 Credits)
What is leadership and how do leaders lead? Can leadership be learned? What skills do 21st century leaders need? This course provides an opportunity to examine leadership theories, to develop a personal understanding of leadership, and to explore the relations of leaders and followers. The essential skills of effective leaders are explored, such as elaborating a vision, facilitating communication, working with groups and teams, overseeing finances, and facilitating change. Students are encouraged to examine systematically their own leadership potential as they reflect on historical and contemporary examples of effective business and political leaders as well as leaders of causes and social movements.

LOS 3050 Financial Management (4 Credits)
All organizations, business, government and not-for-profit, must deal with financial matters. This course provides opportunities to learn how to read and use financial data in order to develop systems for budget creation and control, profit forecasting, and long range development. Basic principles of accounting, cost analysis and control, revenue and expense forecasting, return on investment, and capital reinvestment are studied and applied to examples. The leader's role in financial management are examined, including technical, conceptual, and value considerations.

LOS 3100 Entrepreneurship (4 Credits)
Many individuals dream about starting their own company or being their own boss. This course explores the challenges or entrepreneurship both in starting a new business and in fostering entrepreneurial behavior within larger organizations of all types. Students examine the basic process needed for entrepreneurship, such as idea generation, vision building, cost projection, and outcome delineation. Examples of successful and unsuccessful entrepreneurs will be examined to determine common patterns. Students study and discuss entrepreneurship as a set of skills, values, and attitudes and are invited to consider entrepreneurship as a life skill.

LOS 3150 Working in Groups and Teams (4 Credits)
Teams carry out the majority of organizational activities across all sectors of society today. Principles of team behavior and effectiveness are explored in this course along with the roles of effective leaders of teams and team participants. Various types of teams will be discussed, such as cross-functional, tactical, problem solving, and virtual teams. Factors leading to high performance and dysfunction will be explored and applied to real life examples or teams in organizational settings.

LOS 3200 Cross Cultural Leadership (4 Credits)
In today's complex domestic and international society, leaders or organizations are challenged to manage diversity, establish standards of desirable behavior, and draw out the strengths of all members of the workforce. How do leaders create a climate of cultural sensitivity and openness that encourages diversity and fosters collaboration that transcends diversity? What do leaders do in hiring, supervision, and the use of recognition and reward structures to encourage diversity? An important focus of this course is on developing strategies to face and resolve workplace conflict through processes that ensure fairness, civil discourse, and the integration of diverse perspectives within the organization.

LOS 3250 Learning in Organizations (4 Credits)
Accelerating change in society and in organizations challenges individuals and the organization as a whole to engage in a process of continuous learning. In this course, basic concepts of individual and organizational learning are explored both in terms of their intrinsic value to individuals and as the source of competitive advantage to the organization. How is learning conceived of and structured throughout organizations? How is the return on investment in learning evaluated? This course provides an overview of what organizations do for the training and development of employees, how they structure knowledge sharing, and how they institutionalize within the organization the knowledge of its members through effective knowledge management practices.

LOS 3300 Project Management (4 Credits)
Work in organizations, or in the collaboration among organizations is often structured as projects. Almost any individual in an organization can be called upon to participate in or lead a project. Projects have “deliverables” that must be met within an agreed upon time frame and budget. In this course, students learn the basic concepts and processes of project management: how to establish standards of performance, allot time, calculate costs, develop work break-down structures, delineate critical pathways, enlist people and resources, and motivate accomplishment. Students also learn about software tools available to plan and track successful projects to completion.
Public Policy Social Service Courses

PPSS 2050 Ethical Decision Making (4 Credits)
Ethical decision making is essential for values-based leadership. Most decisions have ethical implications, but discerning the ethical dimension requires skill and an understanding of how ethical issues are shaped and informed by ethical theory. In this class students encounter major philosophical concepts and theories from the field of ethics, utilitarian(consequentialist), deontological (duty based), social contract, communitarian, and natural law theories; principles of non- maleficence, beneficence, justice and respect for persons; and virtues of care, compassion, integrity and courage. Through the use of case studies, students cultivate their capacity for ethical perception, learn to distinguish tough choices from genuine ethical dilemmas, and gain practice deliberating effectively about a variety of ethical issues drawn from both social and professional contexts.

PPSS 2100 Concepts of the Public Good (4 Credits)
All societies have to deal with natural and social inequalities, tension between individuality and community, and competing concepts of what constitutes the good society. What are the forces that create differing concepts of the public good and how are conflicts between competing visions settled? Case studies from cross-cultural research as well as historical and current examples from American culture are used to explore the role of power, class, and group identification in shaping ideas of the public good. An important focus of this course is on understanding how concepts of the public good translate into structures that provide or limit the provision of social services.

PPSS 3050 Social Services in America (4 Credits)
Societies organize to provide essential social services. This course focuses on the arrangements for basic social services in American society: education, healthcare, income, transportation, and housing. The role of government and private providers is explored in the context of the public policy that supports and maintains these services. Various methods and criteria for evaluating the effectiveness of these services will be introduced, such as who will be served, access to services, and satisfaction of the people being served.

PPSS 3100 Law, Politics, and Policy (4 Credits)
How is public policy shaped? Where do ideas for public policy come from and how are they crafted? What are the fundamental legal and political arrangements that structure American society? How are laws made, enforced, and reviewed? How did these arrangements come into being and how do they provide for continuity and change as well as historical and current examples from American culture are used to explore the role of power, class, and group identification in shaping ideas of the public good. An important focus of this course is on understanding how concepts of the public good translate into structures that provide or limit the provision of social services.

PPSS 3150 Comparative Social Services (4 Credits)
How are social services (education, health care, income, transportation, and housing) delivered and developed in market economies other than the United States? How are market, nation state, and family structures used as mechanisms for providing social services in differing socio-cultural and political-economic environments? How are the different approaches to providing social services in other countries related to conceptions of the public good? This course provides skills in the comparative analysis of social services. This class is intended to be taken after "Concepts of the Public Good" and "Social Services in American Society.

PPSS 3200 International Public Policy (4 Credits)
Most of the public policy questions that arise within a nation-state also arise in the international arena as well. Policies regarding education, transportation, healthcare, and income cross national boundaries, affect entire regions, and determine the availability of social services in different parts of the world. Income distribution patterns across nations and access to health care, education, and housing vary significantly between richer nations and poorer underdeveloped nations. How are these differences created and addressed? How are power, values, institutions, and organizations related in their influences on global public policy? What aspects of globalization affect the distribution of resources and opportunities between regions, countries, and subgroups within countries? What roles are played by governments, transnational structures, and non-governmental organizations in addressing international public policy issues? Students select a particular issue or set of issues for international analysis.

PPSS 3250 Policy Research and Analysis (4 Credits)
Students learn to make use of the basic conceptual tools typically employed to examine public policy issues. This course provides a brief presentation of these tools as well as practice in how to apply them to evaluate policy alternatives in areas of education, healthcare, income, transportation, and housing. Students learn how to find resources and relevant data, read research studies, and evaluate the credibility of sources. A major focus of this course is on learning to analyze costs and benefits, weight trade-offs, and predict the probably outcomes and unintended consequences of policy options.

PPSS 3300 Social Policy Transformation (4 Credits)
How is social policy changed? Key examples from American history are used to learn how social transformation takes place. The course begins with an examination of social movements at the opening of the twentieth century that resulted in child labor laws, women's suffrage, unemployment compensation, and minimum wage provisions. How did government become a key instrument of social change under the New Deal? What can be learned from the social revolutions of the 1960s: the civil rights and women's movements? What forces contributed to the rise and success of the Conservative counter revolution? What is the relationship of leadership, government, and grassroots as expressed in the Constitution and Bill of Rights? The course closes with the discussion of possible future social transformations growing out of such things as environmental limits to wealth creation, negative population growth, and median age shift.
Science and Technology Courses

ST 2050 Scientific Method (4 Credits)
What is scientific method and how is it used appropriately? How are problems formulated, research questions designed, tests and other measurements constructed, data gathered and analyzed, conclusions drawn, and findings incorporated into theories? Using scientific topics drawn from the headlines --evolution, ecology, stem cell research in genetics, astronomy, and neuroscience--this course provides an overview of basic science, emerging technologies, and lingering questions.

ST 2100 The Digital Age (4 Credits)
Digitization influences nearly all aspects of life today: how we communicate, conduct business, operate governments, and employ other technologies. This course provides opportunities to learn the fundamental processes of digitization and how hardware, software, and human uses of digital technologies are transforming life across the globe. Students also explore the controversies and ethical dilemmas spawned by digitization, including organizational change, privacy, security, online relationships, and globalization.

ST 3050 Quantitative Reasoning (4 Credits)
Numbers provide a language for reasoning. Numbers are used to quantify data, analyze trends and exceptions, and establish the reliability of conclusions. Using practical problems from business, health care, social services, and government operations, this course provides the opportunity to learn how basic concepts from mathematics can be applied in organizational settings.

ST 3100 Business Computer Applications (4 Credits)
Organizations today purchase technology to solve business problems. This course introduces students to business processes and requirements that can profit from the application of computer technologies. Students develop an understanding of business functions, requirement definition, process mapping, and selection and implementation of appropriate software applications. Topics include such items as System Development Lifecycle (SDLC), process engineering, Enterprise Resource Productivity (ERP), and how to build a case for a particular computer technology application.

ST 3150 Research Methods (4 Credits)
How are research studies designed and conducted and how is quantitative analysis used to analyze and support such findings? This course provides the opportunity to become literate in reading and understanding the basic research done in the sciences and social sciences and reported in newspapers, magazines, and scholarly journals. Using actual examples of research studies, this course provides an introduction to how to read and evaluate studies in a variety of fields. Students learn to look for operationalized constructs and relationships among variables; to recognize what is required for measurement to be valid, reliable, and unbiased; to distinguish between correlation and causation in laboratory and field settings; and how to know the difference between random and convenience samples and the effects these have on the conclusions drawn. Students also develop skills in recognizing flaws in research designs; how to become critical consumers of research reports; and the basic professional ethics for conducting research, including informed consent, voluntary participation, and the risk/benefit ratio.

ST 3200 Using Statistics (4 Credits)
In organizational settings, data becomes meaningful for decision making only when it is interpreted. Such things as determining averages, noting differences, describing relationships, and projecting trends are all part of a larger process of analyzing and interpreting data. In this course, students learn how to use basic statistical techniques to describe and make inferences about data that has been collected for studies and reports. Topics include measures of central tendency (means, medians, modes, standard deviations); tests of difference; measures of strength of relationships among variables (correlation and regression); classic procedures for representing the strength and probable accuracy of findings (significance tests and confidence intervals); and modeling trends over time. Students also learn how computers are used to analyze data and how data can be represented in spreadsheets, graphs, figures, and illustrations.

ST 3250 Science, Technology and Markets (4 Credits)
Scientists within the various disciplines of the sciences (biology, chemistry, physics) pursue knowledge according to the interests, problems, and structures of previous knowledge within their field. They communicate with other scientists internationally, and their findings are reviewed and retested by peers. The discoveries they produce are often taken up and applied to various practical problems and opportunities in daily life. The focus of this course is on understanding how scientific discoveries are used as the basis for the development of technologies useful in manufacturing processes, healthcare, transportation, national defense, energy, and consumer products. Case studies are used to understand how some technologies become successful in the marketplace while others, thought to have promise, do not become widely used. The case studies on technological applications of scientific discoveries also explore the processes involved in moving from science to technology to the market: financial and organizational structures used, potential conflicts over rights of ownership, and ethical issues that surface.

ST 3300 Breakthroughs in Science (4 Credits)
The last fifty years in science have produced amazing new discoveries and reorganized thinking in several basic fields. What are some of the most important scientific breakthroughs in recent times and what is the state of knowledge in those areas? This course provides opportunities to reflect on the future of scientific research. What are the most likely scientific discoveries in the next 25 to 50 years? What conceptual breakthroughs and new technologies will be needed to take scientific understanding and technological applications to the next level in selected fields? What are the likely implications for life in the years ahead? This course also addresses the issue of "Scientific taboo" what science should or should not study and whether scientific and technological inquiry can be slowed down or stopped.

Communication Arts

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St. Denver, CO 80208
A bachelor’s degree in the field of communication provides students with the skills and strategies needed in the business world, such as creating and delivering effective presentations, crafting a well-reasoned argument, and building and enhancing dialogue between people and groups. The Bachelor of Arts in Communication Arts prepares graduates to solve problems, resolve conflict and increase communication options. A communication degree allows students to explore how the media, entertainment industry and commercial institutions affect individuals and society. In addition, students will enrich their understanding of verbal and non-verbal communication, such as writing, speaking and body language; and students will learn how to use art, photographs and other media in presentations. Students complete their bachelor’s degree with a major in communication arts to improve written and verbal skills for personal and professional development. The communication degree requires an integrative project, in which students will synthesize their studies and demonstrate their communication skills. Classes are available on campus and online.

Communication Arts

Bachelor of Arts Major Requirements

(180 credits required for the degree) (p. 52)

Major Courses (40 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 3050</td>
<td>Media and Society</td>
<td>4</td>
</tr>
<tr>
<td>CA 3100</td>
<td>Cross-Cultural Communication</td>
<td>4</td>
</tr>
<tr>
<td>CA 3150</td>
<td>Effective Presentations</td>
<td>4</td>
</tr>
<tr>
<td>CA 3200</td>
<td>Art and Interpretation</td>
<td>4</td>
</tr>
<tr>
<td>CA 3250</td>
<td>How the Body Talks</td>
<td>4</td>
</tr>
<tr>
<td>CA 3300</td>
<td>Creating Dialogue</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3350</td>
<td>Directed Research</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3400</td>
<td>Civic Engagement</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3450</td>
<td>Integrative Project Design</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3500</td>
<td>Integrative Project</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 40

Courses

CA 2050 Effective Communication (4 Credits)
Communication is at the heart of organizations, society, and personal life. This course cultivates an awareness of several key aspects of communication: making a well-reasoned argument, locating and using supporting evidence, speaking or writing persuasively, and using appropriate language and visual support. Communicating with different audiences, crafting well organized presentations, and using various media to express one's ideas and feelings creatively are the major focus of this course.

CA 2100 Creativity and Innovation (4 Credits)
Everyone has a creative core. It can become hidden or lost, but the ability to recognize one's creative source and tap into it at will provides an increased range of communication options. This course focuses on defining creativity and innovation, de-mystifying creativity and learning to cultivate creativity and innovation. We use the "whole brain" approach while learning about the current research showing the neurological pathways of creativity and practice accessing and stimulating these pathways. A critical aspect of this exploration is learning how to keep a mixed media journal and playing with expression that combines both text and visual elements. Students are challenged to solve problems, take risks, and look at themselves and their creative energies in new ways. The experiences and activities of this course build skills and confidence in using one's creativity and innovative thought.

CA 3050 Media and Society (4 Credits)
This course provides a critical examination of media forms and their impact on society. The representation of culture through print media (books, magazines, newspapers, and online media) and through various visual media (film, television, Internet) is explored. Students learn how informational, entertainment, literary, and commercial messages are crafted and transmitted. The focus is on messages, the institutions behind the messages, and their impact on society.

CA 3100 Cross-Cultural Communication (4 Credits)
In an increasingly global society and a world of growing international interaction, communicating effectively with people of different cultural and ethnic backgrounds becomes a challenge but also an opportunity. The ability to accept and transcend differences has personal and professional transformative powers. This course explores a range of communication concepts and theories such as cultural competency, identity theory salience, and the nature of prejudice and its impact on communication. Students have the opportunity to develop and practice skills and abilities that enhance sincere, sensitive, and effective communication across differences.
CA 3150 Effective Presentations (4 Credits)
Researching and refining ideas and then representing them effectively is an indispensable skill. This course focuses on crafting effective written and spoken presentations that employ appropriate organizational, visual, and physical elements. Students have opportunities to select visual elements such as images, graphs, and charts; to address physical considerations such as voice, gesture, and body language; and to relate text, movement, and visuals in effective professional presentations. Students become familiar with and be able to use PowerPoint, In-Design, and Photoshop in crafting and supporting presentations.

CA 3200 Art and Interpretation (4 Credits)
This course examines ways in which meaning is made and communicated through visual imagery. Students learn how to describe, analyze, and interpret visual information, using abundant examples from everyday life, such as photographs, comic books, graffiti, home furnishings, advertisements, buildings, and public art displays. In considering this array of creative effort, students address the difficult question: Is it Art? This course focuses on expanding skills in visual interpretation and developing and using aesthetic standards.

CA 3250 How the Body Talks (4 Credits)
How does body movement reveal or conceal true intent? Humans appear to be “hard-wired” to assess, examine, and respond to the physical language of others. Although this process is often automatic or unconscious, people can learn to identify and employ the elements of physical rhetoric (posture, stance, bearing, expression, and gait) in conscious ways to persuade others. If acting is the “truthful” revelation of character, what can be learned through proven performance techniques to enhance one’s presentation of self in varied settings? This course helps students to become more informed readers of physical signs in others, more aware of their own habitual physical tendencies, and more able to present themselves authentically to others.

CA 3300 Creating Dialogue (4 Credits)
What happens when people speak, listen, and respond? Dialogue can occur between two or three people, in a group, across groups, and within and across organizations and communities. This course focuses on deliberative discussion: how to build and enhance dialogue, and how to repair it when it breaks down. Skills in both participation and facilitation are developed as well as strategies for resolving conflict. The goal of the course is to help students develop skills needed for productive and civil conversation in multiple settings.

Environmental Studies

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St. Denver, CO 80208
Phone: 303-871-2291, 800-347-2042
Email: ucolsupport@du.edu
Web Site: http://www.universitycollege.du.edu

Students gain essential knowledge of the environmental industry with a Bachelor of Arts degree in Environmental Studies from University College, where classes are available on campus and/or online. An environmental studies major enables students to solve problems effectively and make informed decisions. With a focus on environmental studies, students develop skills in reporting, permitting, natural resource management, pollution control, energy and sustainability, and waste management.

University College provides an interdisciplinary approach to observing, understanding and reacting to environmental issues. The environmental studies degree prepares students to thoroughly understand environmental systems and meet the demands of this rapidly changing industry, as well as assess, analyze, summarize and transform data into useful information and knowledge. Students master policy and decision-making techniques as they apply to the complexities of the environment, plus learn how to creatively utilize varying technologies and research to develop solutions to real-world environmental problems.

Environmental Studies

Bachelor of Arts Major Requirements

(180 credits required for the degree) (p. 52)

Major Courses (40 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST 3050</td>
<td>Quantitative Reasoning</td>
<td>4</td>
</tr>
<tr>
<td>ENVU 3100</td>
<td>Environmental Law, Regulations and Policy</td>
<td>4</td>
</tr>
<tr>
<td>ENVU 3150</td>
<td>Environmental Decision-Making</td>
<td>4</td>
</tr>
<tr>
<td>ENVU 3200</td>
<td>Ecology and Ecosystems</td>
<td>4</td>
</tr>
<tr>
<td>ENVU 3250</td>
<td>Natural Resource Management</td>
<td>4</td>
</tr>
<tr>
<td>ENVU 3300</td>
<td>Sustainability Issues and Solutions</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3350</td>
<td>Directed Research</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3400</td>
<td>Civic Engagement</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3450</td>
<td>Integrative Project Design</td>
<td>4</td>
</tr>
</tbody>
</table>
Courses

ENVU 3100 Environmental Law, Regulations and Policy (4 Credits)
There has been explosive growth in environmental regulation in the United States in the last fifty years. In order to function in the environmental field or in other fields in which familiarity with environmental regulation is important, a professional needs to understand the policy context for environmental regulation, as well as have general familiarity with the major environmental laws, their applications and mechanisms. This course is an introductory survey of major federal environmental laws. This course reviews concepts of the English and American common law as they relate to the development of United States environmental law. Students learn the policy objectives, as well as the major provisions and approaches of the National Environmental Policy Act (NEPA), the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the United States approach to regulation of chemicals. Other laws are described as they relate to concepts in the above. Students also learn the roles and relationships of different branches and levels of government in assuring environmental protection.

ENVU 3150 Environmental Decision-Making (4 Credits)
This course provides a broad introduction to environmental decision-making processes with emphasis on understanding the step by step methodologies that can be applied in a number of diverse situations. The class combines analytical methods drawn from the decision sciences and applied ecology with insights from cognitive psychology. By analyzing a series of exigent environmental issues, students learn how to apply appropriate decision methodologies to both complex and simple environmental decisions. The elements of normative, descriptive, and perspective decision strategies are introduced, and students gain hands on experience applying these three decision strategies in different environmental contexts. Decision biases as well as choice architectures are presented, and the implications of personal values, beliefs, and principles for effective decision making are explored.

ENVU 3200 Ecology and Ecosystems (4 Credits)
This course is intended to provide a basic but firm understanding of the science of ecology from an ecosystem perspective. Students examine the ways in which those underlying principles and knowledge describe the world, how ecosystems function, and what services those systems and the discipline provide to mankind and the earth. Ecology as a scientific discipline has existed for more than a century, but in recent years has become increasingly important for understanding the basis and possible solutions to a myriad of environmental issues. Overall, this course provides the basic vocabulary and the underlying principles that give the science of ecology and ecosystems form and function.

ENVU 3250 Natural Resource Management (4 Credits)
Successful natural resource management requires effective multi-disciplinary planning integrating biological, physical, economic, and social sciences using components of human created constructions such as natural resource policies, guidelines, and collaborative planning procedures. A basic premise of the course is that the concept of "natural resources" is human defined and its management is to enhance resource use while maintaining ecological integrity. The emphasis is on the interdisciplinary planning and project implementation for the management of natural resources for desired future outcomes.

ENVU 3300 Sustainability Issues and Solutions (4 Credits)
This course is designed to familiarize students with basic concepts, principles and issues geared toward sustainability, and to provide working tools for sustainability planning. The three major interactive dimensions of sustainability are delineated ( ecological sensitivity, social responsiveness and economic responsiveness) and cover case study examples. A Sustainability Lifecycle Analysis is developed to provide a guide for understanding sustainability and identifying sustainability intervention points for optimizing sustainability initiatives. While sustainability is a strong interdisciplinary subject, the course addresses sustainability in specific sectors, including energy, food, housing, financial services, urban planning, transportation and manufacturing. With those areas in mind, coursework centers on student development of sustainability plans in areas of special interest, including workplace, community of household.

Global Commerce and Transportation

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St. Denver, CO 80208
Phone: 303-871-2291, 800-347-2042
Email: ucolsupport@du.edu
Web Site: http://www.universitycollege.du.edu

Gain the foundational elements needed to effectively manage the transportation of goods and people through a Bachelor of Arts in Global Commerce and Transportation. This exciting new major offered in the Bachelor of Arts Completion Program at University College, where classes are available on campus and/or online, will prepare students to pursue more advanced career opportunities or education in the transportation field.

Developed in partnership with the Intermodal Transportation Institute at the University of Denver, the BA in Global Commerce and Transportation offers hands-on instruction that covers transportation safety and security issues, law and policy, economics and finance, international trade, supply-chain logistics, and transportation modes and nodes. Students who major in Global Commerce and Transportation will also develop superior communication, creative, and decision-making skills—transferable outcomes provided by the bachelor's program that can be applied immediately.
Global Commerce and Transportation

Bachelor of Arts Major Requirements

(180 credits required for the degree) (p. 52)

Major Courses (40 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS 3050</td>
<td>Economics and Finance</td>
<td>4</td>
</tr>
<tr>
<td>GS 3100</td>
<td>Understanding International Trade</td>
<td>4</td>
</tr>
<tr>
<td>GLBL 3200</td>
<td>Transportation Modes and Nodes</td>
<td>4</td>
</tr>
<tr>
<td>GLBL 3250</td>
<td>Supply Chain and Logistics Systems</td>
<td>4</td>
</tr>
<tr>
<td>GLBL 3300</td>
<td>Transportation and Public Policy Issues</td>
<td>4</td>
</tr>
<tr>
<td>GLBL 3350</td>
<td>Transportation Safety and Security</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3350</td>
<td>Directed Research</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3400</td>
<td>Civic Engagement</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3450</td>
<td>Integrative Project Design</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3500</td>
<td>Integrative Project</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 40

Courses

GLBL 3200 Transportation Modes and Nodes (4 Credits)

This course provides an overview of how transportation has driven economic development throughout the world now as well as in history and into the future. From around the world to down the street to your front door global supply chains are dependent upon fast, efficient, and dependable transportation. Whether by air, ocean, rail, track, barge, or pipeline, we are dependent upon the goods firms deliver to us daily. Students learn about the characteristics of these modes of transportation as well as the nodes of access they use including: ports, terminals, distribution centers, flow centers, cross-dock facilities, and the supply chains they serve. This course also addresses how different modes interface to create global intermodal transportation systems that efficiently move goods from origin to destination more efficiently than ever before. Whether it's a manufacturer, distributor, retailer, e-tailer, students learn how effectively managing transportation is a key factor in profitability.

GLBL 3250 Supply Chain and Logistics Systems (4 Credits)

This class provides an overview of supply chain management as a key business function that holistically integrates functions such as planning, purchasing, inventory control, transportation and warehousing. Students learn about topics such as designing supply and distribution networks aligned with the firm’s business and supply chain strategy as well as improving supply chain performance via SCOR, Lean, and Six Sigma techniques. Students explore how various aspects of supply chain management are integrated within the firm as well as coordinated with suppliers, trading partners, and logistics/transportation providers to deliver superior customer satisfaction. Making sound strategic and tactical decisions learned by managing a global consumer electronics supply chain via an online simulation. Best practices are investigated by studying some of the world’s top supply chains such as Dell, Amazon, Apple, HP, Starbucks, Zappos, and Zara.

GLBL 3300 Transportation and Public Policy Issues (4 Credits)

This course provides an overview of the many public policy dimensions of transportation systems. It examines government regulations affecting transportation businesses, environmental regulations, labor laws, finance, public welfare, and the general relationship between economic policy and transportation investment. The class focuses on personal mobility (autos, highways, urban transit, and airlines), but freight transport (rail, ports, and pipelines) are also examined. Future directions in transportation-related public policy are also addressed.

GLBL 3350 Transportation Safety and Security (4 Credits)

Transportation security in the 21st Century challenges the capabilities of our global transportation infrastructure. This course explores the ever evolving requirements imposed on industry practitioners and encourages students to develop skill sets and knowledge required to imbed security in transportation systems. We examine the evolution of the industry’s concerns with safety to concerns about both safety and security and analyze how these concerns drive workforce training and resource allocation. Students assess technological and economic challenges to ensure safe and secure transportation systems. In addition to physical security issues, this course also examines the issues of resilience and preparedness, and how they drive industry practitioners, policy planners and stakeholders.

Global Studies

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St. Denver, CO 80208
Phone: 303-871-2291, 800-347-2042
Email: ucolsupport@du.edu
Web Site: http://www.universitycollege.du.edu
Students interested in international relations learn how social, economic and political issues cross national boundaries and become global issues with a bachelor's degree in Global Studies at University College, where classes are designed and developed for working adults. Degree seekers will examine the interface of economics and politics at the global level and question whether we are moving toward a world of one strong global culture or many local ones. This Bachelor of Arts Completion Program major encourages students to analyze theories of internationalization and make sense of globalization and international relations. Degree-seeking students will work with basic concepts drawn from history, geography and international studies to understand how the world came to be the way it is. Students will also examine how an individual's identity is shaped, both as a citizen of an individual nation and as a citizen of the world. Bachelor's completion students complete a global studies integrative project that expands their perspective of globalization, or allows them to further explore another area of the world through research and writing.

Global Studies

Bachelor of Arts Major Requirements

(180 credits required for the degree) (p. 52)

Major Courses (40 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS 3050</td>
<td>Economics and Finance</td>
<td>4</td>
</tr>
<tr>
<td>GS 3100</td>
<td>Understanding International Trade</td>
<td>4</td>
</tr>
<tr>
<td>GS 3150</td>
<td>Global Politics</td>
<td>4</td>
</tr>
<tr>
<td>GS 3200</td>
<td>International Peace &amp; Security</td>
<td>4</td>
</tr>
<tr>
<td>GS 3250</td>
<td>Society Through Novels and Film</td>
<td>4</td>
</tr>
<tr>
<td>GS 3300</td>
<td>Human Geography</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3350</td>
<td>Directed Research</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3400</td>
<td>Civic Engagement</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3450</td>
<td>Integrative Project Design</td>
<td>4</td>
</tr>
<tr>
<td>BACP 3500</td>
<td>Integrative Project</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 40

Courses

GS 2050 21st Century Global Issues (4 Credits)
Certain problems migrate across national boundaries to become global issues. Population growth and the movements of peoples, energy use, environmental challenges, the spread of disease, hunger, the control of weapons of mass destruction - all are examples of problems that need to be addressed by all nations. The focus of this course is on understanding how certain problems are addressed (or go unaddressed) by nation states, international organizations, and non-governmental organizations. Students learn processes for finding out about these issues and applying those methods through group and individual projects. Students are encouraged to reflect on how these issues may affect them personally and what they can do about them.

GS 2100 The Past as Prologue (4 Credits)
The present-day character of the world's major regions - Africa, Asia, the Middle East, Europe, and Latin America- has been shaped by centuries of history, not only specific events such as wars, elections and peace treaties but also long-term developments in culture, language, religion and politics. This course provides a framework for thinking about general historical trends in selected regions of the world, while emphasizing case histories of countries in each region. By examining these national histories, students not only deepen their knowledge of key regions around the world, but also gain analytical skills that enable them to continue learning about other cultures and societies, and the many ways in which the past shapes the present.

GS 3050 Economics and Finance (4 Credits)
This course begins with a review of fundamental economic concepts, such as supply and demand, cost analysis, money and banking, saving and investment, and the nature and limitations of markets. The emphasis is on how basic economic factors influence all types of organizations and what organizations do to manage their financial affairs through budgets, financial controls, investments, and collaborations with other organizations. The role of international and financial institutions, such as the World Trade Organization, World Bank Group, and International Monetary Fund, be examined. How globalization has altered the economic and financial arrangements between countries is also explored. Students learn to utilize economic and financial tools to identify and analyze international business opportunities.

GS 3100 Understanding International Trade (4 Credits)
Basic concepts of international economics are reviewed to explore how economic factors, such as exchange rates, balance of payments, inflation, labor, tariffs, and the flow of capital, affect trade. Using existing data sources, students explore what countries and regions trade with each other, to what extent, and in what products and services. Students analyze the international trade interactions of a particular state, country, or region, as well as the historical and current factors that impact these patterns. Students explore legal constraints to engaging in international trade, such as requirements for export licenses and screening for individuals and countries where trade is illegal.
GS 3150 Global Politics (4 Credits)
What will the global political landscape look like in the next 10, 25, 50 years? Which countries will dominate the political order? Will there be any dominant Superpowers, or will power be distributed among a variety of nations? In this course, students examine the shifting role of government as the world becomes more interconnected through global trade, communication and travel. Historical theories of international relations are contrasted with new theories that attempt to describe the complex interdependence between countries. What strategies do nation-states employ to advance their global interests? How do nation-states and international organizations interact? What is global governance? In addition to answering these questions, this course also focuses on the changing role of people, of non-governmental organizations (NGOs) and of multinational businesses in this interconnected world.

GS 3200 International Peace & Security (4 Credits)
This course explores the challenges of international security, peace and conflict. In helping students make sense of headlines from around the world, this course first presents major theories of conflict and peace, then examine some of the most important issues currently on the global agenda: terrorism, nuclear weapons, ethnic and religious conflict, the promises and problems of collective security, economic interdependence, global information flows and the rising political power of networked individuals in the digital age. The course challenges students to discover the complex relationships between these issues, question their own assumptions about peace and security, and reflect on how their own identities and futures are affected by the forces explored in the course.

GS 3250 Society Through Novels and Film (4 Credits)
Artistic modes of expression such as film and literature offer a lens for understanding the forces and concerns that have shaped, and are continuing to shape, countries, regions, and peoples. Literary and artistic movements arise because of the particular confluence of history and the creative choices or artists, reflecting the issues that are at the vanguard of the times. Students analyze key works of literature and film in order to learn how these works can provide a concrete understanding of society's cultural values and political events. Simultaneously, students learn how their own values and history as well as their assumptions about artistic creators and observers are present in their interactions with the work being studied and how these factors affect their understanding and region, area, or people they wish to study in this manner.

GS 3300 Human Geography (4 Credits)
Human geography analyzes people and places and how they interact across broad expanses of history and multi-continental distances. This course examines the roles geography and humanity has played in shaping one another in space and time. The course pays special attention to how and why cultures have developed in particular spaces. Global, regional, and national factors are emphasized in considering how a specific place shapes one's identity, values, and traditions. The course also provides an introduction to GIS mapping, and consider issues of global health, eco-refugees, climate change, poverty, sustainability, war, and economics. Students gauge the influence of media and governments on issues of geographic importance.

Information Technology

Office: University College Student Support Center
Mail Code: 2211 S. Josephine St. Denver, CO 80208
Phone: 303-871-2291, 800-347-2042
Email: ucolsupport@du.edu
Web Site: http://www.universitycollege.du.edu

Students pursuing the information technology major expand their fundamental technology knowledge and take their IT careers to the next level at University College, where classes are designed and delivered for busy adults.

A technology degree, offered online or on campus in the evenings, allows students to explore and develop practical skills in systems analysis and design, networking, and web design and programming. Whether currently working in the information technology field, or aspiring to, the hands-on instruction and interdisciplinary approach provide students with the skills necessary to thrive in the IT industry.

Students who major in information technology will be well-prepared to apply for the Information and Communications Technology (ICT) master’s program offered by University College, as the undergraduate major provides the fundamental building blocks for a technology career or further study of ICT at the graduate level.

Information Technology

Bachelor of Arts Major Requirements

(180 credits required for the degree) (p. 52)

Major Courses (40 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST 3050</td>
<td>Quantitative Reasoning</td>
<td>4</td>
</tr>
<tr>
<td>ICT 3100</td>
<td>Systems Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>ICT 3300</td>
<td>Programming and Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>ICT 3400</td>
<td>Database Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ICT 3500</td>
<td>Web Fundamentals</td>
<td>4</td>
</tr>
</tbody>
</table>
ICT 3800  Network and Internet Fundamentals  4
BACP 3350  Directed Research  4
BACP 3400  Civic Engagement  4
BACP 3450  Integrative Project Design  4
BACP 3500  Integrative Project  4

Total Credits  40

Courses

ICT 3000 Fundamentals of Information Systems (4 Credits)
This course provides an introduction to systems and development concepts, information technology, and application software. It includes explanations of how information is used in organizations and how IT enables improvement in quality, timeliness, and competitive advantage. Students learn the differences between personal productivity software and organizational information systems centered on databases and shared content. Coverage includes quality, systems theory, decision-making, and the organizational role of information systems. Organizational uses of information technology including computing and telecommunications systems are stressed. Concepts of organizations, information systems growth, and process improvement are introduced. No prerequisite. Please note that 3000-level courses at University College cannot be used to satisfy graduate-level certificate or degree requirements.

ICT 3100 Systems Analysis and Design (4 Credits)
This course examines the system development and change process, the software life cycle, including adherence to a methodological life cycle, and project management for software projects. Topics include software development paradigms, system engineering, use of modeling tools, function-based analysis and design, object-oriented analysis and design, testing, and documenting software systems. The course emphasizes the factors essential for effective communication and integration between users and systems. It encourages interpersonal skill development with clients, users, and others associated with development, operation, and maintenance of the system. Software quality issues are also considered: software testing, configuration management, quality management, process improvement and software maintenance. Students conduct a hands-on use case exercise and write a Software Development Plan. Please note that 3000-level courses at University College cannot be used to satisfy graduate-level certificate or degree requirements.

ICT 3300 Programming and Data Structures (4 Credits)
This course provides a first exposure to algorithms and fundamental data structures. Working “hands-on” with an integrated development environment, students learn to write and modify code in a widely used contemporary programming language, and discover how their acquired programming skills contribute to the plans, designs, implementations, tests, and maintenance of software solutions. Emphasis is placed on language syntax and structure, data types, arrays, Boolean logic, and functions. The course progresses to topics such as indirection, list and tree structures, object-oriented programming, application programming interfaces, and simple user interfaces.

ICT 3400 Database Fundamentals (4 Credits)
This course introduces databases and database system concepts. The material covers information systems design and implementation within a database management system environment. Incorporating both lecture content and lab exercises, this course gives students a solid comprehension of the benefits and limitations of databases, while allowing them to get hands-on experience building a user interface to an existing database. All application development is done in a graphical environment, using a popular desktop database workbench. Selected file processing issues are also introduced. Please note that 3000-level courses at University College cannot be used to satisfy graduate-level certificate or degree requirements.

ICT 3500 Web Fundamentals (4 Credits)
This course explores the fundamental development techniques of web page design using Hypertext Markup Language (HTML). Students learn how to create fully functional web pages by utilizing web fundamentals and best practices, including: how to effectively create layouts, use graphics, create hyperlinks, and use text formatting features of HTML. In addition, students are introduced to the use of cascading style sheets (CSS) to enhance the look of web pages. To better prepare students for evolving web standards, the course introduces students to the new HTML5 specifications and CSS3 features.

ICT 3800 Network and Internet Fundamentals (4 Credits)
This course covers networking and Internet technologies, hardware, software, and network communications protocols. Students gain knowledge of networking and telecommunications fundamentals including Local and Wide Area Networks, wireless communications, and the Internet. The core of the TCP/IP protocol suite is explored. Voice and data communication concepts, models, standards, and protocols are studied. Students learn about the ramifications of network characteristics such as throughput, latency and jitter on applications and the user experience. Students are introduced to the process of evaluation, selection, and implementation of different communication options within an organization.

Leadership and Organization Studies
With more than 20 percent of all undergraduate degrees in the United States being business-related, individuals must differentiate themselves to compete in the global job market. A bachelor’s degree in Leadership and Organization Studies draws on several diverse subjects such as management, economics, sociology and psychology to help students learn how to function creatively and effectively in all types of organizations including business, government and non-profit.

The critical learning outcomes of a leadership degree are similar to a traditional undergraduate business major; however it offers much more, including civic engagement opportunities, training and development techniques, organizational behavior knowledge and key communication skills. A leadership degree prepares graduates to analyze and change organizational structures, as well as gain perspective on the roles of effective leaders and followers within business. Degree-seekers can take their education to the next level by combining essential business skills with leadership, project management and communication techniques—a diverse portfolio of knowledge that will help students succeed as leaders in the business world.

Students in the Bachelor of Arts Completion Program have the opportunity to learn by doing at University College, through applied classes that are career-relevant and focus on the experience students bring to the classroom. Students can take classes in this bachelor’s degree completion program online and/or on campus in the evenings and learn how to function on high-performance teams, manage diversity and resolve oversight.

**Leadership and Organization Studies**

**Bachelor of Arts Major Requirements**

(180 credits required for the degree) (p. 52)

<table>
<thead>
<tr>
<th>Major Courses (40 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS 3050 Financial Management</td>
</tr>
<tr>
<td>LOS 3100 Entrepreneurship</td>
</tr>
<tr>
<td>LOS 3150 Working in Groups and Teams</td>
</tr>
<tr>
<td>LOS 3200 Cross Cultural Leadership</td>
</tr>
<tr>
<td>LOS 3250 Learning in Organizations</td>
</tr>
<tr>
<td>LOS 3300 Project Management</td>
</tr>
<tr>
<td>BACP 3350 Directed Research</td>
</tr>
<tr>
<td>BACP 3400 Civic Engagement</td>
</tr>
<tr>
<td>BACP 3450 Integrative Project Design</td>
</tr>
<tr>
<td>BACP 3500 Integrative Project</td>
</tr>
</tbody>
</table>

**Total Credits** 40

**Courses**

**LOS 2050 Organizational Behavior (4 Credits)**
Organizations serve as the fundamental building blocks of society. Most people spend a considerable number of hours each week working in or relating to organizations. This course provides opportunities to learn about organizational structures and development, the dynamics of individual behavior within organizations, and how organizations foster and manage change.

**LOS 2100 Leadership (4 Credits)**
What is leadership and how do leaders lead? Can leadership be learned? What skills do 21st century leaders need? This course provides an opportunity to examine leadership theories, to develop a personal understanding of leadership, and to explore the relations of leaders and followers. The essential skills of effective leaders are explored, such as elaborating a vision, facilitating communication, working with groups and teams, overseeing finances, and facilitating change. Students are encouraged to examine systematically their own leadership potential as they reflect on historical and contemporary examples of effective business and political leaders as well as leaders of causes and social movements.

**LOS 3050 Financial Management (4 Credits)**
All organizations, business, government and not-for-profit, must deal with financial matters. This course provides opportunities to learn how to read and use financial data in order to develop systems for budget creation and control, profit forecasting, and long range development. Basic principles of accounting, cost analysis and control, revenue and expense forecasting, return on investment, and capital reinvestment are studied and applied to examples. The leader’s role in financial management are examined, including technical, conceptual, and value considerations.

**LOS 3100 Entrepreneurship (4 Credits)**
Many individuals dream about starting their own company or being their own boss. This course explores the challenges or entrepreneurship both in starting a new business and in fostering entrepreneurial behavior within larger organizations of all types. Students examine the basic process needed for entrepreneurship, such as idea generation, vision building, cost projection, and outcome delineation. Examples of successful and unsuccessful entrepreneurs will be examined to determine common patterns. Students study and discuss entrepreneurship as a set of skills, values, and attitudes and are invited to consider entrepreneurship as a life skill.
LOS 3150 Working in Groups and Teams (4 Credits)
Teams carry out the majority of organizational activities across all sectors of society today. Principles of team behavior and effectiveness are explored in this course along with the roles of effective leaders of teams and team participants. Various types of teams will be discussed, such as cross-functional, tactical, problem solving, and virtual teams. Factors leading to high performance and dysfunction will be explored and applied to real life examples or teams in organizational settings.

LOS 3200 Cross Cultural Leadership (4 Credits)
In today's complex domestic and international society, leaders or organizations are challenged to manage diversity, establish standards of desirable behavior, and draw out the strengths of all members of the workforce. How do leaders create a climate of cultural sensitivity and openness that encourages diversity and fosters collaboration that transcends diversity? What do leaders do in hiring, supervision, and the use of recognition and reward structures to encourage diversity? An important focus of this course is on developing strategies to face and resolve workplace conflict through processes that ensure fairness, civil discourse, and the integration of diverse perspectives within the organization.

LOS 3250 Learning in Organizations (4 Credits)
Accelerating change in society and in organizations challenges individuals and the organization as a whole to engage in a process of continuous learning. In this course, basic concepts of individual and organizational learning are explored both in terms of their intrinsic value to individuals and as the source of competitive advantage to the organization. How is learning conceived of and structured throughout organizations? How is the return on investment in learning evaluated? This course provides an overview of what organizations do for the training and development of employees, how they structure knowledge sharing, and how they institutionalize within the organization the knowledge of its members through effective knowledge management practices.

LOS 3300 Project Management (4 Credits)
Work in organizations, or in the collaboration among organizations is often structured as projects. Almost any individual in an organization can be called upon to participate in or lead a project. Projects have "deliverables" that must be met within an agreed upon time frame and budget. In this course, students learn the basic concepts and processes of project management: how to establish standards of performance, allot time, calculate costs, develop work break-down structures, delineate critical pathways, enlist people and resources, and motivate accomplishment. Students also learn about software tools available to plan and track successful projects to completion.
Dual Undergraduate/Graduate Degree Programs

The University offers dual degree programs leading to the baccalaureate degree and certain master’s degrees in five years. Students interested in a dual undergraduate/graduate degree program should contact the graduate school of interest for advising and information on admissions as early in their undergraduate program as possible. If accepted into a program, a student may begin course work for the graduate program in his or her third or fourth year, depending on the program. At the end of the fifth year, the student earns the bachelor’s and master’s degrees. Many combinations of degrees are possible.

To be eligible for the dual undergraduate/graduate degree program, a student must satisfy all graduate admission standards. Students electing to pursue a dual undergraduate/graduate degree program must follow the procedures required by both the undergraduate and graduate program departments.

The following table outlines undergraduate/graduate dual degree programs and the combined minimum credit hours required for both degrees to be granted.

<table>
<thead>
<tr>
<th>Dual Degree Program</th>
<th>Minimum Overall Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Juris Doctor</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts (Traditional Bachelor's Program)</td>
<td>270*</td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>270*</td>
</tr>
<tr>
<td><strong>Master of Accountancy</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science in Accounting</td>
<td>232</td>
</tr>
<tr>
<td><strong>Master of Applied Science</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts (University College Bachelor of Arts Completion Program)</td>
<td>223</td>
</tr>
<tr>
<td><strong>Master of Applied Science: Information and Communications Technology</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts: Information Technology Studies (Colorado Women's College)</td>
<td>223</td>
</tr>
<tr>
<td><strong>Master of Arts: Art History</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts: Art History</td>
<td>226</td>
</tr>
<tr>
<td><strong>Master of Arts: Education</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts (Traditional Bachelor's Program)</td>
<td>226</td>
</tr>
<tr>
<td>Bachelor of Fine Arts</td>
<td>232</td>
</tr>
<tr>
<td>Bachelor of Music</td>
<td>237</td>
</tr>
<tr>
<td>Bachelor of Science in Accounting</td>
<td>229</td>
</tr>
<tr>
<td>Bachelor of Science in Business Administration</td>
<td>228</td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>226</td>
</tr>
<tr>
<td>Bachelor of Science in Chemistry</td>
<td>226</td>
</tr>
<tr>
<td>Bachelor of Science in Computer Engineering</td>
<td>241</td>
</tr>
<tr>
<td>Bachelor of Science in Electrical Engineering</td>
<td>241</td>
</tr>
<tr>
<td>Bachelor of Science in Mechanical Engineering</td>
<td>235</td>
</tr>
<tr>
<td><strong>Master of Arts: International Studies</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts: International Studies</td>
<td>243</td>
</tr>
<tr>
<td><strong>Master of Business Administration</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Arts (Traditional Bachelor's Program)</td>
<td>248</td>
</tr>
<tr>
<td>Bachelor of Arts: Environmental Science major with Business Administration minor</td>
<td>228</td>
</tr>
<tr>
<td>Bachelor of Fine Arts</td>
<td>254</td>
</tr>
<tr>
<td>Bachelor of Music</td>
<td>259</td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>248</td>
</tr>
<tr>
<td>Bachelor of Science in Environmental Science</td>
<td>231</td>
</tr>
<tr>
<td>Bachelor of Science in Chemistry</td>
<td>248</td>
</tr>
<tr>
<td>Bachelor of Science in Computer Engineering</td>
<td>246</td>
</tr>
<tr>
<td>Bachelor of Science in Electrical Engineering</td>
<td>246</td>
</tr>
</tbody>
</table>
Bachelor of Science in Electrical Engineering with Mechatronic Systems Engineering concentration

Bachelor of Science in Mechanical Engineering

**International Master of Business Administration**

Bachelor of Arts (Traditional Bachelor's Program)
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science
Bachelor of Science in Business Administration
Bachelor of Science in Business Administration: International Business
Bachelor of Science in Chemistry
Bachelor of Science in Computer Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Mechanical Engineering

**Master of Liberal Studies**

Bachelor of Arts (University College Bachelor of Arts Completion Program)

**Master of Professional Studies**

Bachelor of Arts (University College Bachelor of Arts Completion Program)

**Master of Public Policy**

Bachelor of Arts: Public Policy

**Master of Science: All Engineering Programs**

Bachelor of Arts: Applied Computing
Bachelor of Arts or Science: Animation & Game Development
Bachelor of Science: Computer Science
Bachelor of Science in Computer Engineering
Bachelor of Science In Electrical Engineering
Bachelor of Science in Mechanical Engineering

**Master of Science: Geographic Information Science**

Bachelor of Arts: Environmental Science
Bachelor of Arts: Geography
Bachelor of Science: Environmental Science

**Master of Social Work**

Bachelor of Arts (Traditional Bachelor's Program)
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science in Accounting
Bachelor of Business Administration
Bachelor of Science
Bachelor of Science in Chemistry
Bachelor of Science in Computer Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Mechanical Engineering

*Note that minimum overall credit hours are calculated in quarter credits though overall credit hours represents a combination of semester and quarter credits.
Academic Advising

Academic Advising at the University of Denver is a partnership between students, faculty and professional academic advisors. Academic advising is a critical part of a student's educational experience. Students are provided with information regarding course planning, major, minor and degree requirements, medical leaves of absence, leaves of absence, transfer credit, academic policies, the academic exceptions process and campus resources that are available to empower students to meet their goals. Through this partnership, students also learn how to navigate their college experience and they build new skills including time management, organization and how to study.

Academic Advising for Traditional Programs

Office of Academic Advising and Discoveries Orientation

Academic Advising

The centralized academic advising office provides advising and learning assistance for undergraduate students by

- educating students on Common Curriculum and other degree requirements (outside of the major)
- counseling students on academic policies and appeals procedures
- partnering with faculty/major advisors to create a streamlined network of resources
- facilitating medical leaves, leaves of absence, withdrawal and re-entry processes
- administering academic standards and guidelines
- outreaching to and meeting individually with students who are experiencing academic difficulty
- providing support for students at high risk of leaving the University and for the faculty and staff helping those students
- helping students become active and strategic learners through one-on-one and group workshops; and
- establishing student connections to faculty and campus resources.

Academic advising is located in the Center for Academic and Career Development, Driscoll Student Center South, Suite 30. Office hours are 8 a.m.–4:30 p.m., Monday–Friday. For more information, call 303-871-2455, email advising@du.edu or visit the website at www.du.edu/studentlife/advising.

Orientation and Transition Programs

To help students make the transition to college and to the University, DU offers several programs designed to connect students with available resources. For more information, come to the Discoveries Orientation Office in the Center for Academic and Career Development, Driscoll South, suite 30. The office can be reached by phone at 303-871-3860 or on the Web at www.du.edu/discoveries.

Discoveries (New Student Orientation)

Discoveries Orientation assists first-year and transfer students in making the best possible start at the University of Denver. Orientation information is sent to all students who have paid the admission deposit. Discoveries Orientation encourages academic achievement and personal development by preparing students for the challenges and experiences ahead. Discoveries includes academic sessions, small group meetings, wellness sessions, inclusive excellence sessions, faculty interaction and advising, and presentations and discussion sessions to help students get to know the University of Denver and become familiar with community standards and expectations. During evening activities, students meet other students and sample the many co-curricular opportunities available at DU.

Advising for all new students is scheduled during Discoveries Orientation week in the fall or during the Discoveries Orientation programs in winter and spring for new students who start in these quarters. All students must attend an orientation session prior to registering for their first quarter at the University.

First-Year Seminar Program

The instructor for the student's FSEM 1111 First Year Seminar serves as the student's academic advisor and mentor for the entire first year. This course is required for all first-time, first-year students. Students register for FSEM 1111 online the summer prior to their enrollment.

Business & International Studies Advising

Daniels College of Business Advising

The Daniels College of Business Office of Undergraduate Programs is located in Margery Reed Hall and addresses questions about academic and career advising for students who are interested in or already have declared business majors or minors. For more information, email dcbundergrad@du.edu or call 303-871-6910.
International Studies Advising

The BA Program in International Studies advises current and prospective majors and minors on international studies program requirements and academic progress and verifies the completion of major requirements at the time of graduation. For more information, or to schedule an advising appointment, please email baints@du.edu or call 303-871-4495.

Pre-Professional Programs

Pre-Dentistry, Pre-Medicine and Pre-Veterinary Medicine

All students who gain admission to one of the professional schools have completed an undergraduate degree in an academic discipline. Biological sciences, molecular biology, biochemistry and chemistry are among the more popular majors, but students may major in any discipline as long as they fulfill the required courses. Specific requirements may differ among various professional schools. Students should consult with an advisor early in their study to ensure they meet the entrance standards of professional schools.

Generally, the minimum requirements for professional schools include the following:

- Biological sciences—one year in a general course that includes laboratory work
- Chemistry—two years that include one year of inorganic chemistry and one year of organic chemistry, with laboratory work
- English—one year
- Physics—one year in a general course that includes laboratory work (adequate preparation in mathematics is a prerequisite to work in physics)
- Mathematics—calculus is recommended for students applying to medical school; statistics is required for students applying to veterinary schools
- Electives—social sciences, humanities, languages, advanced courses in biology, chemistry and mathematics. Some veterinary schools require biochemistry and microbiology as well. Specific requirements for different programs can be found on the program websites.

Allied Health Professions

Students seeking to pursue physician assistant programs, medical technology, physical and occupational therapy, optometry and other allied professions may enter undergraduate programs that are planned in consultation with the pre-professional advisor. These programs are designed to include the coursework required for admission to professional schools in these areas. The prerequisites often parallel those required for medical, dental and veterinary schools. Some veterinary schools require biochemistry and microbiology as well. Specific requirements for different programs can be found on program websites.

Refer to the Pre-Professional/Allied Health Advising Center web site on the Division of Natural Sciences home page for detailed advising information www.du.edu/nsm.

Law

A student preparing for a career in law does not have to take any prescribed pre-legal courses or claim any particular major. The DU Sturm College of Law and most other leading law schools require students to earn a four-year baccalaureate degree with superior grades.

Business students may be interested in a legal studies (p. 257) minor. Liberal arts students may be interested in a socio-legal studies (p. 357) major or minor.

University College Advising

The mission of the University College Advising Department is to provide guidance and tools to University College students that allow them to achieve their educational goals. To help students with their academic program, University College Academic Advisors are available to assist students by:

- explaining program requirements and assisting with course selection
- providing support and outreach to students with academic difficulty
- counseling students on appeals procedures
- assisting with program changes
- helping students become active and strategic learners
- establishing student connections to faculty and campus resources.

Academic advising is available to all students at University College. Students may schedule an appointment with their academic advisor on PioneerWeb or by calling the Student Support Center at 303-871-2291 or 1-800-347-2042. To schedule an advising appointment, log into PioneerWeb and select the Student tab. In the right column, choose University College under the “Make an Appointment” area. Students can choose if they would prefer an in-office or phone appointment and then check for availability by day and time.
Degree Audit

The Degree Audit is a planning document that provides a record of a student's progress toward fulfilling degree requirements.

It is a summary of the completion of overall degree requirements (e.g., common curriculum requirements, major and minor requirements and electives), including grade point average (GPA). Keep in mind that while the degree audit is useful, it is not a substitute for an appointment with an academic advisor nor is it an official record of courses and grades. The degree audit is intended as an advising tool only; it is not a transcript.

Instructions for printing degree audits:

2. Select the Student tab at the top of the page.
3. Under Registration Tools, click on Degree Audit.
4. Select the current term and click submit.
5. To view an existing degree audit, click on Previous Evaluations at the bottom of the page. Please be aware that by choosing this option, you may not see recent changes to your degree audit. For the most accurate degree audit, click on Generate New Evaluation at the bottom of the page. Please Note: You can also click on your degree program to view the last degree audit that was run for you.
6. If generating a new evaluation, select the program for which you would like to run a degree audit and then click Generate Request.
7. Before printing, make sure the text size is set to "smaller" or "smallest." Click the print button at the top of the screen.

"What-If" Analysis

Students may choose to run a degree audit for any degree or major using a "What-if" analysis. The What-If analysis allows you to run a degree audit for any degree and major. Undergraduate students, if your current major is History, the What-If option can help you determine how your current courses would apply if you changed your major to French. Graduate students considering a change of program can run a degree audit to view course requirements for another program.

Please note: Undergraduate majors are still changed through the declaration of major form; some majors require a secondary admission process. Graduate students must still follow formal admission processes to change programs.

Instructions for printing a "What-If" analysis:

2. Select the Student tab at the top of the page.
3. Under Registration Tools, click on Degree Audit.
4. Select the current term and click submit.
5. Click on What-If Analysis at the bottom of the page.
6. Follow the instructions listed on the page for each step. When you're ready to view the degree audit, click submit.
7. Select the current term and then click Generate Request.
Registration

Registration Offices
Registration is overseen by different offices depending upon the student’s program. Questions about the registration policies or procedures detailed below should be directed toward the appropriate office.

Traditional undergraduates may contact the Office of the Registrar at 303-871-4095 or visit www.du.edu/registrar.

The University College Registrar can be reached at 303-871-2291 or www.universitycollege.du.edu/bachelors.

Registration Access
Students may not attend classes without being officially registered for them. Students may register online via the secure University portal, PioneerWeb (https://PioneerWeb.du.edu) or in their program’s registration office. Instructions for Web registration are available at www.du.edu/registrar. The University of Denver does not print a quarterly course schedule. Go to www.du.edu/registrar and select Schedule of Classes from the Courses and Schedules dropdown menu. Select the appropriate quarter (only the Sturm College of Law uses the semester system) to search for course listings.

Student’s Financial Liability
It is the student’s responsibility to know and abide by the University’s payment and refund policies. By completing registration, the student agrees to pay the total amount of tuition and other charges set forth, whether or not the student attends these courses. It is the student’s responsibility to drop any courses not attended or courses that the student does not plan to complete.

Registration Clearance
Prior to each registration period, students must seek advising (p. 392) from their appropriate academic advisor in order to register for the upcoming quarter. Once a student has received advising, the advisor will indicate the student is cleared to register for courses at the student’s assigned registration time. Students are responsible for knowing add/drop deadlines and processes, tuition refund schedules and health insurance waiver information, including waiver deadlines. All of this information can be obtained online at www.du.edu/registrar.

Registration Access
Students may register at or after their assigned time but not before. Students should not miss class to register. Registration is generally available online at PioneerWeb (https://PioneerWeb.du.edu) 24 hours a day, seven days a week during official registration periods. Online registration access may be unavailable when system maintenance is required. Students may also conduct registration transactions in their appropriate program office. Instructions for registering on the Web can be found at www.du.edu/registrar.

Registration Holds
A hold indicates that there is an obligation to fulfill or an action to be taken with an office on campus. The majority of holds prevent registration activities. Holds are also used to prevent the release of transcripts or the acceptance of admission applications.

Prior to the registration process, students are expected to check for holds. Holds typically have a contact phone number included in their description. To clear a hold, the student must contact the office issuing the hold to find out what must be done to fulfill the obligation(s).

Holds can be checked at any time by logging on to PioneerWeb (https://PioneerWeb.du.edu). Click the myWeb tab, click on Student & Financial Aid and then click on Student Records. Finally, click on the View Holds link. The type of hold is listed along with a contact phone number so that it can be addressed. Only the office that placed the hold can remove it.

Priority Registration for Traditional Undergraduates
Priority registration is so named because matriculated students in a traditional undergraduate program are given priority to register for classes before new students and most non-degree, visiting or special-status students. Matriculated continuing students are given a priority time assignment based on the number of credit hours completed.

Priority registration time assignments (time tickets) are scheduled for one week following a scheduled advising week. Registration times are assigned to all students based on credit hours completed and credit hours in progress. With the exception of varsity athletes and students needing special accommodations, students with the most credit hours register before students with fewer hours.

Continuing (currently enrolled) students are expected to register for the upcoming term during priority registration. Students must register before the first day of classes to avoid late-registration service charges.
Readmitted and Returning Students

Students in good academic standing who are returning to the University after taking a leave of absence of one or more terms are eligible for priority registration provided the appropriate University official is notified prior to the first day of the scheduled priority registration period. Traditional students must see an advisor in Academic Resources prior to a leave of absence and upon returning to their program. University College students should consult with their academic advisor.

Late Registration

Registration beginning on the first day of the quarter is considered late registration. Traditional students (continuing, new, returning from leave of absence and readmitted) who do not register for at least one course before the first day of the quarter are assessed a late-registration service charge that cannot be waived. A service charge of $25 is assessed the first day of the quarter for all students who have not enrolled in at least one course prior to the first day of the quarter. A $50 service charge is assessed from the second through the fifth days of the quarter. A $100 service charge is assessed beginning the sixth business day and continuing through the remainder of the quarter.

Course Registration

Changes to Registration

Traditional undergraduate students may drop or add courses without approval or penalty during the first seven days of a quarter (Monday-Sunday, summer session excluded). Schedule changes can be made online via PioneerWeb (https://PioneerWeb.du.edu). Students may also make schedule changes by contacting their college's registration office. See www.du.edu/registrar for specific dates and procedures regarding registration and drop/add deadlines.

Section Changes

Students may change from one section of a course to another with the instructor's approval for the section being added. The section being dropped is deleted from the student's record.

Adding Courses

Traditional students may add open courses through the first week of the quarter without approval unless course-specific permissions are required (i.e., instructor, department, independent study/research form). University College courses must have instructor approval to add once they have begun.

After the first week of the quarter, students must add classes through their college's registration office. Instructor approval is required.

Students must be registered in courses they are attending. Students may not attend classes for which they are not enrolled. It is at the instructor's discretion to allow a student to enroll in a course after the first week of the term. Students are responsible for making up assignments for missed class meetings.

Under no circumstances may courses be added after the eighth week of the quarter (during the last 10 business days of the quarter). Refer to the Important Dates link under Calendars and Deadlines on the registrar's website for specific dates.

Variable Credit Hours

Some courses can be taken for variable credit hours (e.g., a course can be taken for either 2 or 3 credits). If appropriate, students can select the desired credit hours during Web registration. When registering for a course with variable credit hours via the Web, by default a student is registered for the minimum number of credit hours. The student is responsible for changing the credit hours. This is accomplished by clicking on the underlined number that appears in the CRED column under Current Schedule. After clicking, students are taken to a screen where the number of credits appears in a white form field. Enter a numerical value in this field and click Submit. The credit hours for the course should change to the desired number.

Registration Approvals

Courses requiring special permission or forms, such as independent study, directed study or independent research, may require registration in the appropriate registration office. Students are expected to identify prerequisites and course restrictions prior to attempting to register. Up-to-date prerequisite and restriction information is available on the online schedule of classes. Courses that have been transferred in from other institutions may not be recognized as meeting prerequisites and could result in a registration error message (due to missing prerequisites).

To prevent registration errors that block a student's ability to enroll in a course, the student should contact the appropriate office before the registration time assignment for required approvals or with requests for exceptions to restrictions. Proactive actions are particularly important for students participating in a study abroad program. When an academic unit deems it appropriate to grant approvals or permissions to override restrictions, or to enroll in closed courses, the approval can be given via a signed drop/add form.
When a form is required or a registration error results at the time enrollment is attempted, the student should register for all other courses via the Web. The student can then procure the appropriate forms, signatures or electronic approvals without compromising his or her course schedule. Students who feel they are blocked from a course in error should contact their registration office immediately.

**Maximum Credit Hours and Full-Time Status**

A full-time traditional undergraduate student may enroll for 12–19 quarter hours of credit each quarter. However, the tuition flat rate is set at 12–18 quarter hours (i.e., upon enrollment in 12 quarter hours, tuition remains the same through 18 quarter hours). Each quarter hour taken in excess of 18 hours, therefore, is charged at the current hourly tuition rate. University College students are not eligible for the flat-rate fee.

A quarter-hour load of more than 19 hours requires approval from the student’s advisor; students in the Daniels College of Business may also need approval from Daniels College of Business Student Services. Overload approval can be granted electronically or in writing. The total study load includes all courses taken at the University of Denver and at other institutions concurrently.

Courses taken for no credit (NC) are applied toward the total study load and tuition fee assessment. Approval for an overload status depends on a student’s grade point average (minimum 3.0 the preceding quarter), the reason for requesting the overload and the student’s work schedule. The maximum enrollment for any quarter is 20 quarter hours.

**Dropping Courses**

**Administrative Withdrawal from Cancelled Courses**

Students are administratively withdrawn from courses that are cancelled by the University. Cancelled courses are deleted from the student’s record and tuition charges are reversed if appropriate. Students are notified of the cancellation by the department, college or school responsible for offering and cancelling the course.

**Student Responsibility**

With the exception of administrative withdrawals, a student must officially drop a course or a failing (“F”) grade is assigned. For example, if a student ceases to attend a course, the student remains enrolled in the course unless the student officially drops the course online or through their registration office. University College students must contact their registration office to officially withdraw from a course. Courses dropped after the end of the sixth week of the quarter require instructor’s approval. The instructor’s signature is required on an add/drop form.

A request for withdrawal submitted without required approvals will not be processed, and the student receives a failing (“F”) grade for the course. The student is liable for payment of all tuition and charges related to the course.

**Mandated Withdrawal Resulting from Non-Attendance**

The attendance policy for a course is left to each instructor’s discretion. Traditional students who have not attended the first week of classes (or equivalent) and who have not made arrangements with instructors for excused absences prior to the first class meeting can be required to drop the course. Once the instructor notifies a student that she or he cannot attend the course, the student is expected to initiate the drop in their program’s registration office. Students who are not allowed to continue in a course but who do not officially drop the course will earn a failing grade (“F”) for the course. Students subject to mandated withdrawal due to nonattendance will be responsible for tuition and fees associated with the course at the time of withdrawal. Students who do not officially withdraw from the course will be responsible for all tuition and fees associated with the course.

**Official Drop Periods**

Courses dropped through the first seven days of a quarter (Monday–Sunday, summer session excluded) are deleted from the student’s record. Tuition will be reversed through this time period (first 10 percent of the term), if applicable.

A notation designating a withdrawal (“W”) is assigned for courses officially dropped after the first week of the quarter. The course appears on the student’s record with a withdrawal (“W”) grade notation. Credit hours for the withdrawn course are not earned and the “W” grade notation is not calculated in the GPA. A course may be dropped without instructor approval through the published date for automatic withdrawal (generally the end of the sixth week of a quarter, 60 percent of the term). Withdrawal deadlines and tuition refund schedules are available at www.du.edu/registrar.

**Withdrawal Restrictions**

**Academic Dishonesty**

A student can be prevented from dropping a course in cases of suspected academic dishonesty. A course can be reinstated if the student has dropped the course during the automatic withdrawal (“W”) period. In cases of suspected academic dishonesty, the Office of the Registrar can reinstate a previously dropped course. The Office of the Registrar is not required to notify the student of reinstatement. Once the case is heard by the Office of Citizenship and Community Standards and academic dishonesty is determined, an instructor may assign a failing (“F”) grade for the course in question. A withdrawal notation (“W”) for the course, even if processed during the automatic withdrawal period, is not honored. If the accused student is found innocent of academic dishonesty, and there has been an attempt to drop during the automatic withdrawal period, the drop is processed and a notation of
withdrawn ("W") assigned. Refer to www.du.edu/studentlife/studentconduct or the Honor Code (p. 421) page in this bulletin for policies and procedures concerning academic dishonesty and the University of Denver Honor Code.

Drops with Approval
An instructor may refuse permission to drop a course when a student is failing the course. After the sixth week of the quarter, approval from the instructor is required to drop a course. See www.du.edu/registrar for these and other important dates. Note: Five-week courses, interterms and summer sessions may have different deadlines. Please consult the registrar’s website for up-to-date information about add/drop and refund deadlines.

Drop Deadlines
Withdrawals during the two weeks (10 business days, Monday–Friday) before the scheduled final exam period are not permitted. Exceptional approval: Students who have extenuating circumstances that make it necessary to drop classes after the drop deadline may contact Academic Resources to file a Petition for Exception to Academic Policy. If granted, approval to drop courses after the drop deadline does not automatically grant a tuition refund. See the process for Tuition Refund Appeal (p. 402).

Repeating Courses
Students must receive approval from their major department or college to repeat a nonrepeatable course. Credits in the major and the minor must be earned at the level of "C-" or better. Some degree programs required a "C-" or better for other requirements. A student may, if required by the program, repeat a nonrepeatable course. The highest grade received, if "C-" or better, fulfills requirements. However, hours earned toward graduation are counted only once. The course is counted as part of the regular class load, and the cumulative GPA includes all grades for the course.

Regular tuition is charged for the repeated course. However, only one repetition of a previously-passed course may count in a student's enrollment status for federal financial aid purposes. In other words, the third repetition may not be counted for federal financial aid such as student loans or grants.

Course Information

Online Schedule of Classes
Detailed information pertaining to classes available for the current academic year is viewable online via a searchable schedule of classes. Schedules for prior years are available in schedule archives. The online schedule of classes, instructions for use and schedule archives can be found on the Office of the Registrar website at www.du.edu/registrar.

Because the online schedule of classes is available to the general public, prospective students and other interested parties can view detailed information about courses offered for specific terms. The detailed information available from the schedule of classes makes it a valuable tool for developing course schedules prior to advising and registration. The class schedule listing page includes instructor email links, section notes, meeting times and links to other section information for courses meeting search criteria.

Course Number Designation
0001-0999: pre-collegiate, remedial, or continuing education unit courses
1000-1999: undergraduate courses (lower division)
2000-2999: advanced undergraduate courses (upper division)
3000-3999: advanced undergraduate and graduate courses (combined)
4000 or over: graduate courses

Independent Study
Independent study offers the opportunity to extend learning beyond formal courses and to explore intellectual independence. To be eligible for Independent Study, a student should demonstrate qualities necessary for interested and intensive inquiry. Students must obtain an independent study form from their program's registration office. Registrar approval is required before the form is completed by the student, instructor and chair of the department.

The following policies apply:
- The independent study project must be considered as upper-division credit (course number 3991).
- At least one hour (quarter) of credit is required for Independent Study, and a maximum of 10 credit hours can be applied toward degree requirements, except for students in the Honors Program. Ordinarily, a maximum of five credit hours of independent study may be taken in any quarter.
- Individual academic departments may have further restrictions on the number of Independent Study hours that can be applied toward major requirements.
Independent study may not replace a course listed in the course catalog.

The student, instructor and chair of the department must agree upon the title and outline of the independent study project.

In addition to these policies, undergraduate students who do not meet the following criteria will not be approved for independent study.

**Non-Business Independent Study**

To be eligible for independent study in non-business disciplines, an undergraduate must meet the following criteria:

- The student must be in academic good standing (i.e., a minimum 2.0 GPA).
- The student must have been enrolled as a full-time student during the preceding quarter.

**Business Independent Study**

To be eligible for independent study in business disciplines, an undergraduate must meet the following criteria:

- The student must be a business major.
- The student must have reached junior standing (completed 90 quarter hours) and degree checkpoint 2.
- Of the hours completed, 45 must have been completed at the University of Denver.
- The student must have been enrolled as a full-time student during the preceding quarter.
- The student must have a minimum 2.5 GPA.

**Independent Research**

Independent research opportunities are available to students for dissertation and thesis research or other independent research.

The following policies apply:

- Independent research projects (course numbers generally ending in 995) appear on the student’s transcript with the specific topic as the course title.
- On successful completion of the project or on its termination by request of the department, the research advisor will record a final grade. The department may use the A-F grading system in evaluating the research or record ‘P’ (pass) or ‘F’ (fail).
- Projects must be undertaken within the academic term in which they are registered.
- Students obtain applications from their academic department or the Office of the Registrar. Partial applications will not be processed.
- The responsibilities of the instructor of record are the following:
  1. See that the grades are submitted;
  2. Approve the course of research;
  3. Approve the credentials of other faculty involved;
  4. Agree to assume responsibility if problems arise.
- Registration after published registration dates is not permitted.

**Directed Study**

A directed study course is a permanent catalog course delivered on an individual basis when the course is not offered in a given term. Directed study courses are approved under extenuating circumstances to provide an opportunity to complete a required course. The following policies apply:

- Directed study courses must be approved by the instructor and department concerned.
- Directed study courses (1992, 2992, 3992, 4992, 5992) appear on the student’s transcript with the specific course title.
- Projects must be undertaken within the academic term in which they are registered.
- There can be no change in the basic content of the course. In particular, this means the level, subject code, description, title, grading policy (A–F, P/ NP), credits and course content cannot differ from the permanent course.
- Directed study courses use the same forms and processes as independent study. Partial applications are not processed.
- Registration after published registration dates is not permitted.
- The responsibilities of the instructor of record are to
  1. See that the grades are submitted;
  2. See that the material is presented in full in a timely manner;
  3. Approve the course of study;
  4. Approve the credentials of other faculty involved; and
  5. Agree to assume responsibility if problems arise. The faculty member must have taught the permanent course or a related course prior to teaching a directed study.
Experiential Learning/Internship Credit

Juniors and seniors may earn up to 10 quarter hours of credit for cooperative education and internships if offered in their program. Approval by the faculty advisor and/or director of internships and cooperative education is required prior to registration or beginning the work experience. All internships follow a planned schedule of activities as established by the school in cooperation with the job establishment. Students are expected to maintain regular contact with their faculty advisor and complete appropriate assignments as dictated by their instructor.

Courses for No Credit

A student may register for no credit (NC) with the approval of the course instructor. Regular quarter-hour credit is used to count the total academic load even though the course earns no academic credit. The tuition charge for no-credit enrollment is the same as a course taken for credit. The course is listed on the student’s academic record with a grade of (NC). A grade of no credit is not calculated in a student’s GPA, and the credit hours do not apply toward a degree. A no-credit registration cannot be changed to credit registration after the first five days of the quarter. A student enrolled for credit cannot change to no credit after the end of the sixth week of the quarter. University College does not offer courses for no credit.

Auditing Privileges

Auditing privileges are available only to full-time students (those enrolled for 12 or more quarter hours) who have the approval of the course instructor. Auditing privileges are not available for Daniels College of Business or University College courses. No tuition is charged, and no record of the course is made. A student does not officially register for a course that is being audited. A student who wants an audited course to appear on his/her academic record (transcript) should see the Courses for No Credit section in this bulletin for an alternative option. Approval for auditing privileges is granted at the instructor’s discretion and only where space is available.

Graduate Courses for Undergraduate Credit (Credit Counted toward Bachelor’s Degree)

With advance approval of the chair and the department or the dean of the college or school, undergraduate students may request to take a graduate course for undergraduate credit. Graduate courses taken for undergraduate credit may not be used again for credit upon enrollment in University of Denver graduate programs. Students should consult the college, school or department to avoid potential conflict.

Graduate Credit for Undergraduate Students (Credit Counted toward Graduate Degree)

With advance approval of the chair and the department or dean of the college or school, undergraduate students who are within 10 credit hours of the number required for graduation and who have fulfilled specific requirements may receive graduate credit for a maximum of 10 credit hours of 3000- and 4000-level courses taken in excess of the graduation requirements.

ROTC Credit

A maximum of 18 hours of elective credit may be earned through ROTC.

Concurrent Registration

Students wanting to enroll in courses at another institution while enrolled at DU must petition the Academic Exceptions Committee (p. 411). No transfer credit is allowed for courses carried concurrently without prior permission. The total study load allowed may not exceed 19 quarter hours. Courses taken concurrently must not be available at the University of Denver.
Immunizations and Health Insurance Requirements

Immunization Requirements

Colorado law (see Colorado Revised Statutes 25-4-901 to 909) and Colorado Department of Public Health & Environment regulations require all college and university students physically present on campus and enrolled for one or more classes to submit proof of immunization as described below.

All new incoming students who were born on or after January 1, 1957 must have had two measles, two mumps and one rubella doses, the first administered no earlier than four days before the first birthday and the second at least 28 calendar days after the first dose. Measles, mumps and rubella (MMR) vaccine is not required for students born before January 1, 1957. In lieu of immunization, written evidence of laboratory tests showing immunity to measles, mumps and rubella is acceptable.

Prior to the start of classes, students must submit the completed Certificate of Immunization form to the Health & Counseling Center. Students must submit proof of immunization before coming to campus. Students that fail to submit proof will not be allowed to register for classes.

In the event of a disease outbreak, those students who requested a medical, religious or personal exemption from the immunization requirement will be withdrawn from classes until the outbreak is contained and will not be entitled to a refund of tuition for any missed time.

A downloadable form and instructions can be found at www.du.edu/hcc. Alternative records, such as childhood records, may be acceptable upon review of the Health and Counseling Center staff. Please call 303-871-2205 for more information.

While meningitis vaccination is not required, studies have shown that college students are at increased risk of contracting this potentially life-threatening disease. For this reason, the Centers for Disease Control and Prevention and the American College Health Association strongly recommend that college students consider vaccination to reduce this risk. The State of Colorado requires all incoming students to complete a Meningococcal Information notice acknowledging that students or their parents/guardians are aware of the risks of meningitis. The questionnaire is available at www.du.edu/hcc.

Note: University College students are exempt from this requirement.

Student Health Insurance Requirements

All students enrolled in traditional programs at the University must participate in the Student Health Insurance Plan (SHIP) unless they can show that they have other adequate coverage that remains in force throughout the academic year for which they are enrolled. SHIP insures the student at school, at home or while traveling. A brochure describing SHIP benefits, costs and exclusions is available from the Health and Counseling Center and on its website at www.du.edu/hcc.

SHIP premiums appear on the tuition bill twice a year—in the fall and spring quarters—unless a waiver has been submitted in the fall for the entire year. Students with adequate coverage who wish to waive SHIP may do so online through Student Financial Services at https://myWeb.du.edu. If the premium is not waived by the deadline (usually the third Friday after the beginning of classes in both the fall and spring quarters), the student will be enrolled and will be responsible for paying the premium. Questions about SHIP should be directed to the Health and Counseling Center at 303-871-2205. Questions about SHIP waivers should be directed to the Bursar’s Office at 303-871-4944.
Bursar’s Office

The Bursar’s Office provides the following services: tuition-billing, payment-counseling services, federal Perkins post-disbursement servicing, emergency and institutional short-term loans, tuition-receivable collection, past-due tuition payment arrangements and cashiering services. The Bursar’s Office is located on the second level of University Hall, room 223. Cashiering services provided include processing tuition and loan payments and cashing personal checks of up to $50 for faculty, staff and students. The Cashier’s Office, located within the Bursar’s Office, is open from 8:15 a.m.–4:15 p.m. (MST), Monday–Friday. The Bursar’s Office can be contacted by phone at 303-871-4944, by email at bursar@du.edu and by mail at Bursar’s Office, 2197 S. University Blvd., Denver, CO 80208-9404.

Financial Aid

In Financial Aid, we help students and their families finance a DU education. From applying for aid to managing unmet cost, we’ll provide you with guidance, resources and advice at every step along the way. Approximately 83 percent of undergraduate students receive financial assistance from the University. This assistance may be in the form of merit scholarships, talent scholarships, need-based grants, long-term loans and/or part-time employment. Financial assistance is provided by the University, the State of Colorado, the federal government and University supporters. All applicants for need-based financial assistance, including scholarships, must file the Free Application for Federal Student Aid (FAFSA) each year along with the CSS PROFILE. For an incoming first-year or transfer student to be assured priority consideration for available funds, the FAFSA and the CSS PROFILE should be filed no later than February 15. For a current student to be assured priority consideration for available funds, the FAFSA and the CSS PROFILE should be filed no later than March 15. Applicants filing after this date are considered for assistance from funds available after all priority applicants have been considered. Students may be selected for verification of the data reported on the FAFSA and/or CSS PROFILE. Financial Aid will contact applicants for additional documents required for verification.

Tuition and Fees

Tuition and Fees

Tuition Deposit

New undergraduate students must submit a nonrefundable $300 deposit, payable through the Office of Admission, by May 1. The deposit is applied to the first quarter’s tuition. The $300 deposit does not apply to Women’s College and University College undergraduate students.

Tuition Charges

Tuition for traditional undergraduate programs during the regular academic year (fall, winter and spring quarters) is charged at a “flat rate” for students carrying 12-18 quarter hours. Students registering for more than 18 quarter hours, including courses for no credit, are charged an hourly rate per quarter hour over 18. Other academic programs, such as those through the Women’s College and University College, are charged an hourly rate and may have different rates. The “flat rate” does not apply to these programs. Tuition rates are the same for Colorado residents and nonresidents. The University reserves the right to make changes in tuition charges and refund policies without advance notice. Tuition and fees are generally due and payable 10 days prior to the first day of the term. If registration activity occurs after the due date, tuition and fees are due and payable at registration. Information regarding payment methods and options can be found at www.du.edu/bursar.

Student Fees

To enhance opportunities for students’ use of technology in and out of the classroom and to provide multiple modalities of student learning, a quarterly technology fee is charged to all students. This fee is based per quarter hour taken. The student activity fee is assessed to all undergraduates and provides funding for various campus activities designed to appeal to the entire undergraduate population.

Late Payment Fee

Registered students for a given term who have not paid or made appropriate arrangements to pay their tuition may be assessed a late payment fee of $150. Every 30 days thereafter an additional late payment fee of $150 will be assessed until the account is paid in full.

Student Financial Liability

It is the student’s responsibility to abide by the University’s payment and refund policies. Upon the student's completion of the registration process—and if the student does not withdraw from registration by the end of the fifth day of the term—the student agrees to pay the total amount of tuition and other charges set forth. The student understands that if any payment is not made when due, or if the student withdraws or is required to withdraw from the University for any reason, all remaining tuition and other charges are immediately due and payable. The student agrees to pay all collection costs and charges. If the student has any outstanding overdue charges, the University may recover those overdue amounts by reducing any payments owed by the University to the student.
Students are not canceled from classes based only upon nonpayment. Students who do not officially withdraw from classes and who do not attend are assigned "F" grades and may owe tuition and charges as specified above.

Students with a past-due balance for a given term are not allowed to enroll in classes for the subsequent term; grades, transcripts and other attendance certification are withheld until payment is received.

**Tuition Refund**

**Refund Information**

The date of withdrawal from a class is the date that the Registration Office receives written notification of withdrawal, or the date the student drops the class via the Web. For tuition charges to be reversed at 100 percent for complete withdrawals, refer to registration deadlines listed on the Office of the Registrar's website at www.du.edu/registrar. The website posts specific refund dates. Refunds are first applied to any obligations owed to the University, including charges associated with future dates.

**Tuition Refund Appeals**

A student may appeal for an exception to the University refund policy in cases where circumstances are beyond the student's control. A student must officially withdraw from the course(s) prior to beginning the appeals process. The statute of limitations for appeal is 90 days from the end of the course term for which the tuition is being appealed.

**Informal Appeal/Automatic Refund**

If a student drops all classes for a given term, an informal appeal for a full refund may be made to the Office of the Registrar. An informal appeal requires that the withdrawal is completed and a request for a tuition refund is made prior to the end of the sixth week of the term (defined by the deadline for an automatic "W"). To be eligible for an automatic refund, the condition for withdrawal must meet one or more of the following criteria and must be accompanied by appropriate documentation as specified.

- A physical and/or mental illness prevents the student from completing the course(s). Documentation required: for physical illness, a letter on letterhead from a physician; for mental illness, a letter on letterhead from a psychiatrist or other licensed mental health professional. The letter must specifically state that the student was advised to withdraw due to illness.

- The death of a student (sixth-week deadline for informal appeal waived) prevents the student from completing the course(s). Documentation required: a memorial service folder, notice in the paper or copy of the death certificate.

- The serious illness or death of an immediate family member prevents the student from completing the course(s). Documentation required: for serious illness, a letter on letterhead from a physician, psychiatrist or other licensed mental health professional; for death, a memorial service folder, notice in the paper or copy of the death certificate.

- A job relocation or loss of employer reimbursement eligibility due to involuntary job loss prevents the student from completing the course(s). Documentation required: a letter on letterhead from the immediate supervisor or human resources administrator.

- An unexpected increase in job responsibilities, required change in work schedule or required travel prevents completion of the course(s). Documentation required: a letter on letterhead from the immediate supervisor or human resources administrator that specifies dates of increased workload or travel. The documentation requirements, as listed above, must be submitted to the Office of the Registrar prior to the end of the sixth week of the term. If the documentation is adequate and establishes a condition that prevents the student from completing the course(s), appropriate adjustments are made to the student's account. If conditions do not merit an automatic refund, the student may make a formal appeal. Registrar's or Bursar's Office staff reserve the right to request a formal appeal if, in their judgment, conditions and/or documentation are inappropriate or dubious.

**Formal Appeal**

In cases where circumstances do not fit the criteria for an informal appeal, the end of the sixth-week (automatic "W") deadline has passed or an informal appeal is not accepted, a formal appeal for a full or partial refund may be filed. Petitions are filed through PioneerWeb. Select the Student tab, locate Documents/Requests in the upper right hand section of the page and select Request for Tuition Appeal. Petitions are reviewed and decided by the tuition appeals committee, which meets monthly. The decision of the committee is final and is communicated to the student by letter.

**NOTE:** In accordance with federal, state and institutional regulations, approval of an appeal may require forfeiture of any financial aid proceeds received, which may result in an outstanding balance owed to the University.

**Financial Aid**

**Withdrawal and Financial Aid**

Any student who begins classes at DU, applies for financial aid, completes all of the requirements to obtain aid and then withdraws from classes may have his or her financial aid adjusted according to federal, state and institutional regulations. Students must contact the Office of the Registrar to
withdraw officially from the University. Students must contact Academic Advising after withdrawing to complete leave of absence information. Leave of absence affects financial aid status upon return to the University; it does not affect withdrawing from the University.

Students who withdraw during the 100 percent refund period (drop/add) for any term may have all of their aid for that term cancelled and returned depending on the type of withdrawal. Students who drop below the number of hours reflected in their financial aid budget during the drop/add period will have their budget adjusted to reflect the new hours and aid will be adjusted accordingly.

**Federal Regulations Regarding Withdrawals**

**Title IV Funds included in the following calculation descriptions:**

- Federal Direct Student Loans (unsubsidized)
- Federal Direct Student Loans (subsidized)
- Federal Perkins Loans
- Federal PLUS Loans
- Federal Pell Grants
- Federal SEOG Grants

**Earned Title IV Aid**

Title IV funds are awarded to students under the assumption that they will attend school for the entire period that the aid is awarded. Upon withdrawing from the University of Denver, a student may no longer be eligible for the entire amount of Title IV aid he or she was awarded and/or received. The University of Denver Office of Financial Aid is required to calculate how much of the Title IV aid the student is eligible to receive.

Federal regulations state that a student earns Title IV aid based on the period of time he or she remains enrolled for a particular term:

\[
\text{Enrolled Days} = \% \text{ of Title IV Aid Earned Days in the Enrollment Period}
\]

Percentages are calculated to four decimal places and then rounded to three. The third decimal place is rounded up if the fourth decimal place is five or greater. The only exception to this rule occurs when students have reached the 60 percent point. If the student remains enrolled beyond the 60 percent point, he or she has earned all of the Title IV aid for that period.

Any student who begins classes at DU, applies for financial aid, completes all of the requirements to obtain that aid and then fails to receive at least one passing grade for that term (or fails to complete the withdrawal process listed above) may have financial aid adjusted according to federal, state and institutional regulations (all regulations that follow apply to students in this situation). Students in this situation will have their Title IV withdrawal calculated at the 50 percent point unless their professors submit written proof that they were enrolled beyond that point.

If the amount disbursed is less than the amount the student is eligible to receive, the student will receive a post-withdrawal disbursement to his or her tuition account at the University of Denver. If this post-withdrawal disbursement contains loan funds, the student may elect to decline these funds to avoid incurring additional debt. The student will be notified of any post-withdrawal disbursements owed to him or her via email at his or her DU account. The University of Denver may automatically use all or a portion of a post-withdrawal disbursement (including accepted loan funds) for tuition, fees, or room and board charges. For all other charges on the student’s account, the student must authorize the school to use the post-withdrawal disbursement to cover them by completing a Title IV Authorization Form. If the student does not authorize DU to use these funds, the funds will be refunded to the student, who will be required to pay any balance due.

Earned aid will show as a credit on the student’s tuition account and may be refunded if it exceeds all charges. Any portion of Title IV aid that the student has earned but has not received for the term will be disbursed to the student’s tuition account.

**Repayment of Unearned Aid**

If the amount disbursed to the student is greater than the amount he or she is eligible to receive, the amount overpaid must be returned. If a balance is created on the student’s DU tuition account, the student will be billed and is responsible for these charges. This means that the student may be required to return all or a portion of a refund check received from the University of Denver. The unearned portion of a student’s aid must be returned to the Department of Education. The responsibility to repay this aid is shared by the student and the University of Denver.

**The University of Denver is responsible to return the lesser of**

- the total amount of unearned aid, or
- the institutional charges for the term multiplied by the percentage of unearned aid.

The student must return any remaining amount. Any loan amounts that must be returned (either the student’s loan or the student’s parent’s PLUS loan) must be repaid in accordance with the terms of that loan’s promissory note (i.e., the student will make scheduled payments to the holder of the loan over a period of time). Any unearned grant funds that the student must repay represent an overpayment. The amount the student must repay is equal to half
of the unearned amount. The University of Denver will return any grant funds required on the student’s behalf, and the amounts paid on the student’s behalf will be charged to the student’s tuition account. The student must make arrangements with DU to pay back the unearned grant funds.

Questions

Students with questions about this process can call the Office of Financial Aid at 303-871-4020 or the Federal Student Aid Information Center at 800-4-FEDAID. The Office of Financial Aid is open from 8 a.m.–4:30 p.m. (MST), Monday–Friday, and the Federal Student Aid Information Center is open from 8 a.m.–midnight (EST) seven days a week. TTY users may call the Federal Student Aid Information Center at 800-730-8913. The center also has information online at www.studentaid.ed.gov (http://www.studentaid.ed.gov).

State and Institutional Regulations Regarding Withdrawals

State and institutional grants will be prorated to match the tuition refund policy for tuition and fees. If the student withdraws and all tuition is not refunded, the prorated state or institutional grants received for that term can be used to help cover this expense, not to exceed tuition.

If the student has taken out a private loan for the withdrawal term and the student has a credit on his or her account after all other aid has been returned according to the regulations listed above, the University of Denver will return private loan funds to the student’s lender. The amount returned will be the lesser of the credit amount on the student’s tuition account or the total amount of the private loan for the term. Any remaining credit will be sent to the student from the Bursar’s Office.

Financial Aid Applications

The Free Application for Federal Student Aid FAFSA (available January 1st for the following academic year) http://fafsa.ed.gov

The Free Application for Federal Student Aid (FAFSA) is used to determine eligibility for federal aid. We strongly encourage you to use the IRS data retrieval process when completing your FAFSA. Using this process will quickly transfer tax return data directly into your application and may prevent you from having to submit further documentation from the IRS. It does take some time for your tax data to be available via the IRS data retrieval tool once your returns have been filed. Find out more at StudentAid.gov (http://studentaid.ed.gov/fafsa/filling-out/#when-irs-drt).

If you use estimates when completing your FAFSA, please go back and correct your FAFSA using data retrieval (http://www.du.edu/financialaid/media/documents/using_data_retrieval.pdf) once you have filed your taxes.

Make sure you include University of Denver’s Federal School Code: 001371.

The CSS PROFILE (available late October for the following academic year) http://profileonline.collegeboard.com/prf/index.jsp

This application--provided through the College Board--is used to determine your eligibility for institutional aid. If your parents are divorced or separated, the Noncustodial Parent PROFILE (http://www.du.edu/financialaid/undergraduate/apply/ncp.html) must also be completed. (Note: This step is not required for students in the Colorado Women's College, University College or students majoring in music.)

The College Board charges $25 for the first college and $16 for each additional college. First-time applicants from families with low income and limited assets may be eligible for an automatic College Board fee waiver. If you're concerned about paying the fee, we encourage you to complete the PROFILE application and see if you qualify for an automatic fee waiver.

Make sure you use University of Denver’s PROFILE School Code: 4842.

Federal Direct Subsidized/Unsubsidized Loans

An education is one of the best long-term investments you can make in your future, and borrowing is one way to fund that investment. With careful planning, a loan can be a smart decision for you and your family, as many educational loans have more favorable terms than other consumer loans (such as car loans or credit cards). However, since all loans must be repaid, you should only borrow what you need.

Lender:

U.S. Department of Education

Eligibility Requirements:

Available to students who have submitted a FAFSA. Subsidized loans are available to students with financial need; unsubsidized loans are available regardless of need. If eligible, one or both of these loans will be included in your award package.

Maximum Loan Amount:

Dependent Students as defined by the FAFSA (except students whose parents are unable to obtain PLUS Loans)

First-Year Undergraduate $5,500—No more than $3,500 of this amount may be in subsidized loans.
Second-Year Undergraduate $6,500—No more than $4,500 of this amount may be in subsidized loans.

Third-Year and Beyond Undergraduate $7,500—No more than $5,500 of this amount may be in subsidized loans.

Independent Students as defined by the FAFSA (and dependent undergraduate students whose parents are unable to obtain PLUS Loans)

First-Year Undergraduate $9,500—No more than $3,500 of this amount may be in subsidized loans.

Second-Year Undergraduate $10,500—No more than $4,500 of this amount may be in subsidized loans.

Third-Year and Beyond Undergraduate $12,500—No more than $5,500 of this amount may be in subsidized loans.

Interest Rate:

Both types of loans have a fixed interest rate (currently 3.86% for 2013-2014). The U.S. Department of Education pays the interest on a subsidized loan while you are enrolled at least half-time (6 credits). Interest accrues on an unsubsidized loan while you are in school and on both loans during the grace period and during repayment. Interest can be paid as it accrues; if not paid, it will be capitalized at repayment. New fixed interest rates are set on each July 1st for the upcoming academic year.

Fees:

An origination fee (currently 1.072% for 2013-2014) is deducted at disbursement of each installment of the loan.

Disbursement Requirements:

To receive funds, you must accept the loan(s) through PioneerWeb, complete both a Master Promissory Note and Entrance Counseling online at www.StudentLoans.gov (http://www.StudentLoans.gov), and remain enrolled at least half-time (6 credits).

Repayment Terms:

Repayment begins once the 6-month grace period ends after you graduate or after you are no longer enrolled at least half-time. Payments are made to your Direct Loan servicer.

Repayment Options:

The standard repayment period is 10 years but can be as long as 30 years depending on total borrowing and chosen repayment plan. Loans may be consolidated with other federal loans.

Federal Perkins Loans

Because funding is limited for this loan program, not all students who would otherwise be eligible for this loan will be offered it as a part of their financial aid package each and every year.

Lender:

University of Denver

Eligibility Requirements:

You must have submitted the FAFSA by the priority application deadline and have demonstrated financial need to be offered this loan (depending on funding).* If eligible, this loan will be included in your award package.

Maximum Loan Amount:

Up to $4,000 per academic year.

Interest Rate:

5% fixed. Interest does not accrue while you are enrolled at least half-time (6 credits) or during the grace period.

Fees:

None

Disbursement Requirements:

To receive funds, you must accept this loan (http://www.du.edu/financialaid/undergraduate/manageyouraid) through PioneerWeb, complete and submit a Master Promissory Note (http://www.du.edu/bursar/debt/perkins-promissory.html) to the Bursar’s Office, complete entrance counseling at MappingYourFuture.org (http://mappingyourfuture.org/oslc/counseling/index.cfm?act=Intro&OsicTypeID=3) and remain enrolled at least half-time.
Repayment Terms:
Repayment begins once the nine-month grace period (http://www.du.edu/financialaid/undergraduate/graduation) ends after you graduate or after you are no longer enrolled at least half-time. Payments are made to the DU Bursar's Office (http://www.du.edu/bursar).

Repayment Options:
Loans may be consolidated with other federal loans.

Federal Work-Study/Student Employment Program

There are many good reasons to work while attending DU. Students minimize borrowing by earning money to help pay for college expenses and gain valuable skills and experience. Many studies show that working while taking classes can actually improve academic performance.

Financial Aid is here to assist DU students with two kinds of work opportunities: work-study and other part-time positions.

What is work-study?
Work-study is a need-based financial aid award that allows students to work on campus (or with an approved off-campus employer) to earn money to help pay for educational expenses. It’s not a grant (because students must work to earn it), and it’s not a loan (because students don’t have to repay it).

Eligibility:
Because work-study funding is limited, it's not included in all students' award packages. Priority is given to those who applied for financial aid by the priority deadline (http://www.du.edu/financialaid/undergraduate/apply), and if the student is eligible, it will be included on his or her financial aid award letter. If the student has been offered work-study, he or she will need to accept it on (http://www.du.edu/financialaid/undergraduate/manageyouraid/award.html) PioneerWeb by July 1st and secure a position by October 15th or it will be cancelled. (Current students who are studying abroad in the fall have until January 31st to secure a position.) Students can only apply for work-study positions if he or she has this award as a part of his or her financial aid package, and he or she must be enrolled at least half-time (6 credits) to use it.

Getting Paid:
The amount shown on the student's award letter is the maximum amount he or she can earn over the academic year (typically $2,500 for new students and $3,000 for continuing students). The student's actual earnings will depend on his or her work schedule and hourly rate. Since there is no pre-set pay rate, the amount earned will depend on the position acquired. The student will be paid every two weeks for the hours worked, and the student's paycheck will be sent directly to him or her (not applied to the student's bill).

Other Part-Time Positions:
There are other work opportunities available! Student Employment maintains an online job board of off-campus positions in the greater DU and Denver area. These positions are available to all students, regardless of financial need or work-study eligibility. Pay rates range from $10-$20+ per hour, and there are wide array of positions available. Access the job board listings through the Student Employment website (https://du.studentemployment.ngwebsolutions.com/CMX_Content.aspx?cpid=161).

For more information about employment opportunities, contact Student Employment (http://www.du.edu/studentemployment) at 303-871-6792 or stuemp@du.edu.

Merit-Based Funds

The University of Denver is committed to giving high-potential students access to DU's foundational and transformational education.

- **You are automatically considered** for merit scholarships when you apply for admission to DU.
- Eligibility for these awards is based on high school GPAs and scores on standardized tests.
- **If you are eligible for a merit scholarship, you will be notified in your DU acceptance letter.**
- Awards amounts (http://www.du.edu/apply/admission/apply/merit.html) range from $3,000 to $18,000 annually.
- Awards are renewed for 12 consecutive quarters (excluding summer quarters).
- You must be enrolled full-time (at least 12 credits) and maintain Satisfactory Academic Progress (SAP) (http://www.du.edu/financialaid/undergraduate/policies/sap.html) to remain eligible.
- Merit scholarships are not available to students who are seeking a second bachelor's degree.
Academic Standards and Grading

Academic Standards

University Good Standing

A student in good standing has met academic standards and University financial and behavioral obligations. A student in academic good standing has earned a number of grade points equal to at least twice the number of quarter hours attempted (i.e., has a 2.0 GPA). Registration can be denied to any student not in good standing. Transcripts, certificates and diplomas are withheld until financial obligations are met.

Warning, Probation and Suspension

Each quarter the Academic Standards Committee, composed of University faculty, reviews the records of students not making satisfactory progress toward graduation. The committee decides on the academic status of these students. A student with a GPA between 2.2 and 2.0 is placed on academic warning while remaining in academic good standing with the University. A student with a GPA below 2.0 is no longer in academic good standing and is placed on academic probation or may be suspended or dismissed from the University. Students not in academic good standing are notified at the end of each quarter by U.S. mail and the student’s preferred email address.

A student on academic probation may continue enrollment only under certain conditions set by the University and the appropriate academic unit. A student on academic probation is expected to meet with an advisor in the Center for Academic and Career Development on a regular basis. The student is ineligible to represent the University in intercollegiate activities.

An academically suspended student who wishes to re-enroll must apply for re-entry to the University and must also apply to the chair of the Academic Standards Committee at least six weeks before the quarter in which the student wishes to enroll. The University does not accept courses completed at another institution while the student is under academic or disciplinary suspension. A student who is dismissed may not enroll again at the University of Denver.

University Grading System

Instructors are required to assign a final grade for each student registered in a course. The following grades are used to report the quality of a student’s work at the University of Denver:

<table>
<thead>
<tr>
<th>Grade Symbols</th>
<th>Grade Points</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>good</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>satisfactory</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
<td>minimum passing</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>failure</td>
</tr>
</tbody>
</table>

If a student ceases attending classes or submitting assignments (and has not earned a passing grade) and if the student has not made arrangements for an incomplete (I), a failing (F) grade must be assigned.

Failing (“F”) grades may also be assigned under the following circumstances:

- A student drops a course without permission and/or official notice to the Office of the Registrar.
- A student’s academic work is judged failing as a result of a finding of academic dishonesty.
- A student registers for but never attends a class.

An incomplete (“I”) is a temporary grade that may be given to a student at the instructor’s discretion when illness, necessary absence or other reasons beyond the control of the student prevent completion of course requirements by the end of the academic term. Incomplete grades may only be given in the following circumstances:

- The student’s work to date is passing.
- Attendance has been satisfactory through at least 60 percent of the term.
• An illness or other extenuating circumstance legitimately prevents completion of required work by the due date.
• Required work may reasonably be completed in an agreed upon time frame.
• The incomplete is not given as a substitute for a failing grade.
• The incomplete is not based solely on a student’s failure to complete work or as a means of raising his or her grade by doing additional work after the grade report time.
• The student initiates the request for an incomplete grade before the end of the academic term.

Appropriate grades must be assigned in other circumstances. A failing grade and last date of attendance should be recorded for students who cease attending class without authorization. Students who are unable to complete a course and who do not meet these circumstances should consider dropping the course.

The following provisions for incomplete grades apply:

• The instructor submits the final grade using the Change of Grade Process through PioneerWeb (https://PioneerWeb.du.edu). Steps for this process can be found at http://www.du.edu/registrar/records/changinggrades.html.
• It is in the student’s best interest that incomplete grades be made up by the end of the following academic term. Incomplete grades must be made up and final grades submitted within one calendar year from the date the incomplete was recorded.
• The course work may be completed while the student is not enrolled.
• Incomplete grades appear on the transcript for one year. Incomplete grades do not affect the grade point average. After one year, or at the time of graduation, incomplete grades will change to “F” and affect GPA. This policy affects incomplete grades given in fall 1995 and thereafter. Prior to 1995, unchanged incompletes remained on the permanent record as part of hours attempted and were calculated as a failing (“F”) grade in the GPA.
• An incomplete grade may not be considered passing for purposes of determining academic standing, federal financial aid eligibility, athletic eligibility or other purposes.
• Notation of the original incomplete status of the grade remains on the student’s transcript along with the final grade.
• An incomplete should not be assigned when it is necessary for the student to attend additional class meetings to complete the course requirements. Students who receive an incomplete grade in a course must not register again for the course in order to remove the “I.”
• An incomplete is not to be assigned where the normal practice requires extension of course requirements beyond the close of a term (e.g., thesis or project type courses).

NC: registered for no credit
W: a notation that the course is withdrawn without prejudice; zero grade points per quarter hour; no hours credited

Use of intermediate grades (plus and minus) is at the discretion of the instructor.

See Grade Appeals (p. 410) for more information.

Grade Point Average (GPA)

The GPA is determined by multiplying the credit points (for example, “B+” = 3.3) by the number of credit hours for each course. Total the credit hours attempted, total the credit points and divide the latter by the former. Grades of “NC,” “I” and “W” are not included in the GPA. Incompletes that are not completed within one year are calculated as an “F” in the GPA. All grades for repeated courses are included in determining GPA. Undergraduate, graduate and specific program GPAs may be calculated separately.

Pass/Fail

In general, undergraduates may not take a course for pass/fail credit.

Change of Grade

Grades submitted by instructors at the end of the quarter are final and not subject to change by reason of revision of judgment on the part of the instructor. Grades cannot be changed on the basis of second trial, such as a new examination or additional work undertaken or completed after the grade report has been submitted to the Office of the Registrar. In the event of error, the faculty member should initiate the Change of Grade Process through PioneerWeb (https://PioneerWeb.du.edu). Steps for this process can be found at http://www.du.edu/registrar/records/changinggrades.html. Any correction or appeal of a grade must take place in the quarter following the one in which the grade was given.
Procedure for Grade Appeals

Guidelines for Interpretation and Implementation

Scope of Review
Grade appeals must be based on problems of process and not on differences in judgment or opinion concerning academic performance. The burden of proof rests on the student to demonstrate that one or more of the following occurred:

- The grading decision was made on some basis other than academic performance and other than as a penalty for academic misconduct.
- The grading decision was based upon standards unreasonably different from those which were applied to other students in the same course and section.
- The grading decision was based on an unreasonable departure from previously articulated standards.

The chairperson, grade appeal committee or dean may recommend grade changes but shall have the power to alter grades only in cases of clearly established procedural error or substantial capriciousness or arbitrariness in evaluation.

Timeline
The formal procedure must be started within 45 calendar days after the contested decision or grade was officially recorded. The grade appeal process officially begins on the date the “Academic Appeal” document is received by the faculty member.

Appeal Record
Any appeal must be in writing, dated and headed with the words “Academic Appeal.” Once a formal appeal is presented to a faculty member, it must be presented in its original form at all later levels of appeal, although new statements may be added at any time.

Any evidence and all direct and supporting statements once made become part of the permanent record of the appeal and must be produced at each level of appeal.

At each level of appeal, a written, dated decision and written reasons for the decision must be provided to the affected party or parties--the student, the faculty member and any person who has rendered a decision at an earlier level of appeal.

Students are permitted to submit evidence in writing. At the discretion of the University, students may be invited to present their appeal in person.

Grade Appeal Process

First Level: Appeal to the Faculty Member
A student will, where possible, attempt to resolve the issue informally with the professor before filing a written grievance. Should attempts at informal resolution fail, the student may wish to file a formal grade appeal. After receiving a formal appeal, the faculty member shall assure that a written decision with express reasons is available or delivered to the student within 30 calendar days. Should the student fail to take further action within seven calendar days after receiving the faculty member’s decision, that decision shall stand. If the student is dissatisfied with the decision or does not receive a response from the faculty member within 30 calendar days, he or she may proceed to the second level of appeal.

Second Level: Appeal to the Department Chair/Program Director
If the student elects to continue the appeal, he or she may appeal to the chair of the department or program director if there is no chair. The chair or director shall assure that a written decision or recommendation about the appeal is available or delivered with express reasons within 30 calendar days after receiving the appeal.

If the student is dissatisfied with the decision or does not receive a response from the chair or director within 30 calendar days, he or she may proceed to the third level of appeal. Should the student or faculty member fail to take action on the chair’s decision or recommendation within seven calendar days following its receipt, the accepted recommendation of the faculty member or new decision by the department chair shall be final.

Third level: Appeals Committee
If the student elects to continue the appeal after the chair’s decision or recommendation has been received, he or she may take the matter to the dean of the appropriate academic unit (or the dean’s designee) within seven calendar days.

The dean shall ascertain within 30 calendar days whether the appeal procedures at the first and second levels have been duly followed; if they have not, he or she will require that they be followed before taking further action.

The appeals committee shall consist of three faculty members chosen by the dean or the dean’s designee. The dean or designee shall serve on the appeals committee as chairperson without vote. All deliberations of the committee will be closed and confidential.
Faculty from the same department as the faculty member involved in the case may not serve on the appeals committee.

The appeals committee should meet as soon as possible, but no later than 30 calendar days after a written, dated request for appeal at this level has been received and the Dean has ascertained that appeal procedures at the first and second levels have been duly followed. The presence of all eligible committee members (the three faculty members and the dean or designee) shall constitute the quorum.

A written recommendation shall be furnished by the appeals committee and transmitted through the office of the dean to all affected parties within seven calendar days after the conclusion of the committee’s deliberations.

The decision of the appeals committee is final.

Exceptions to Academic Policy

Exceptions

Petitions for Exception to Academic Policy

Undergraduate students seeking exceptions to academic policy at the University can obtain advising and instructions about completing a Petition for Exception to Academic Policy form from the Center for Academic and Career Development or, if he or she is a business major, from the Undergraduate Advising Center in the Daniels College of Business. Petitions involving exceptions must include appropriate supporting documentation. Exceptions to departmental major or minor requirements must be accompanied by supporting statements from the chairperson of the respective department. Instructions can be found online at www.du.edu/studentlife/advising.
Academic Support

Anderson Academic Commons
The Anderson Academic Commons brings together the University of Denver’s top library and academic support services in one place to enhance student learning. Opened on March 25, 2013, the Commons is the campus centerpiece for collaborative, technology-infused teaching, learning and engagement. The main library and other key services located in the Anderson Academic Commons support research, writing, teaching and learning as well as provide access to collections, services, technology and a wide variety of study spaces. For more information on the library’s services and collections, please see http://library.du.edu.

Center for World Languages and Cultures
The Center for World Languages and Cultures (CWLC) supports and encourages study of languages and cultures and provides free language tutoring for all DU students, including English for non-native speakers, on a drop-in basis at Anderson Academic Commons. In addition, the Center facilitates the study of a number of less commonly taught languages through various programs. The CWLC administers the language placement tests for DU undergraduate students, as well as the graduate language proficiency tests. The CWLC is generally open from 8 a.m.-4:30 p.m., Monday-Friday. For more information, visit our web site www.du.edu/cwlc or contact us at 303-871-4601 or cwlc@du.edu.

Chemistry and Physics Help Center
Graduate and undergraduate teaching assistants are available to help students with problems regarding both lecture and lab courses for general chemistry, university physics, general physics, and 21st century physics and astronomy.

Digital Media Center
The Digital Media Center (DMC) is a self-service, post-production studio and is open to students, faculty, staff and members of the public. A key value of the DMC is the empowerment of all users, from beginner to advanced, so that users become independent and proficient in using high-end professional production and editing software.

Lending Services Desk
The Lending Services Desk facilitates access to the University Libraries systems, services, materials and information. Key services available at the desk include materials and gadget check-out, course reserves and interlibrary loan.

Math Center
The Math Center offers free, drop-in assistance for algebra, trigonometry, business calculus and calculus I, II and III classes.

Research Center
The Research Center offers expert guidance through the research process: from refining a topic to finding and evaluating relevant sources to creating a bibliography. A consultation session can ease anxiety about a project or paper and teach research and evaluation skills for life-long learning. One-on-one research consultations are available to current DU students, faculty and staff at any stage of the research process.

Special Collections
Special Collections and Archives provides access to and assistance with using rare books, manuscripts and personal papers, including the University of Denver Archives, the Beck Archives on Rocky Mountain Jewish History and fine press and artists’ books.

University Technology Services Help Center
The Help Center provides phone, email, online and walk-in computer support for all faculty, staff and students at the University of Denver. Hardware and software support is provided for both PCs and Macs. The Help Center also assists with issues related to DU network services and Microsoft Office products.

Writing Center
The Writing Center supports and promotes effective student writing across the University of Denver campus. In a non-evaluative collaborative setting, the Center helps DU students with all kinds of writing projects: class assignments, personal writing, professional writing and multimedia projects. We serve any student affiliated with the University and invite students in all classes, at all levels of writing ability and at any stage of the writing process to visit us.
Disability Services Program (DSP)

The DSP coordinates accommodations that afford equal opportunity and full participation in University programs for undergraduate and graduate students with documented disabilities. Undergraduate students who wish to speak to someone about accommodations should make an appointment with a DSP staff member.

It is the joint responsibility of the student, DSP and other DU faculty and staff to work together to meet students’ needs. Students should familiarize themselves with the Handbook for Students with Disabilities, available in the DSP office and at www.du.edu/studentlife/disability.

DSP requires up-to-date documentation of a student’s disability for its files. A student’s documentation is kept separate and private and is not part of the student’s DU records. Students can choose to sign a Release of Information form so that DSP staff members are able to speak with DU faculty and staff on the student’s behalf.

For further information, please contact the DSP office located on the fourth floor of Katherine A. Ruffatto Hall. Contact DSP by calling 303-871-2278. Office hours are 8 a.m.–4:30 p.m., Monday–Friday.

Learning Effectiveness Program (LEP)

The LEP provides academic support to DU students with learning disabilities, ADD/ADHD or a history of learning differences. LEP is a fee for service program. Students enrolled in LEP sign a one-year renewable contract. LEP assists students in developing compensatory and academic skills. These skills are not only useful during the undergraduate experience, but also readily transfer to the world of work.

The four cornerstones of LEP student development are self-advocacy, self-awareness, self-determination and accountability. Students and academic counselors build a trusting and caring relationship based on mutual respect. LEP recommends that all students in the program meet with their academic counselor for a minimum of one hour per week. LEP offers discipline-specific tutorial support in addition to the services of the academic counselor. Working with the LEP counselor, the student can access tutors who are available throughout the week. Another important service of the LEP is the organizational/time management specialist available to students.

LEP is located on the fourth floor of Katherine A. Ruffatto Hall. Contact LEP by calling 303-871-2372 or by visiting www.du.edu/disability. Office hours are 8 a.m.–4:30 p.m., Monday–Friday.
Many students who come to the University of Denver have been engaged in their community and would like to continue their civic development at DU. The Center for Community Engagement and Service Learning (CCESL) leads the campus in embracing the University of Denver’s commitment to “being a great private university dedicated to the public good.” Our mission is to educate, engage and equip the campus community to accomplish tangible public work that improves the lives of people in our communities. CCESL programs focus on developing active citizens by working with students, faculty, on-campus partners and the community through a community organizing framework. Community organizing is about people working together for systematic social change.

CCESL works with students and faculty across four initiatives. First, the Community-Engaged Learning initiative focuses on how students can learn through service. By building reciprocal relationships between classrooms and communities, service learning classes offer opportunities for students to advance critical thinking, develop civic skills, address public problems and become leaders. Second, the Community-Engaged Scholarship initiative focuses on helping students and faculty do research and creative work with community partners for the public good. Students take on leadership roles in research and creative work through CCESL’s Science Shop or assist faculty partners as Public Good Associates. Third, the Service Initiative offers students ways to serve our communities that focus on connecting service to academic learning through critical reflection, examination of root causes, community building and increasing campus and community capacities. Fourth, the Civic Development Initiative offers students diverse program options to develop their civic identities to prepare for active participation in civic life through public good work and community organizing.

From engaging with public school students through the Public Achievement program to the Puksta Scholars civic development program and DU Service and Change student-led service activities, CCESL is a gateway for students to find their voice in our world. Please visit our website at www.du.edu/ccesl or call at 303-871-3706, or email ccesl@du.edu.
Study Abroad

At the University of Denver, we strive to develop cross-cultural connections—and the new perspectives that come with them—by encouraging students to study and live abroad for at least one quarter. We want our graduates to appreciate and to understand the differences and interdependencies that characterize our world.

The University of Denver strongly invests in study abroad because we believe that as many students as possible should have the opportunity to discover how education really comes to life in an international context.

DU’s Office of International Education (OIE) offers more than 160 DU Partner Programs around the globe. DU Partner Programs are programs with which DU has a formal affiliation and credit earned is counted as DU resident credit. DU’s OIE reviews each of these programs with the intent to provide high-quality international academic programming and opportunities that will among other things:

- introduce students to exciting new ways of seeing and knowing;
- allow students to pursue special academic interests in a fresh context, including service learning or an internship;
- help students develop a new international perspective on their major;
- give students the opportunity to explore in-depth aspects of the history, society, and culture of the host country;
- permit students to take electives unavailable at DU;
- start students on the road to a new minor; and
- let students fulfill some of their general degree requirements.

While most students find a DU Partner Program that fits their needs, it is sometimes appropriate for a student to participate in an unaffiliated program if its location, enrollment capacity, minimum prerequisites or academic offerings cannot be reasonably matched by a DU Partner Program. The unaffiliated program selected by a student may not duplicate a study abroad program already offered by DU and must be pre-approved by the OIE. Credits earned on unaffiliated programs are transfer credit. A more detailed comparison of the differences between DU Partner Programs and unaffiliated programs can be found at www.du.edu/abroad/getting_started/programs.html

Cherrington Global Scholars

To foster an internationalized campus culture, in Fall 2004 the University of Denver introduced the Cherrington Global Scholars (CGS) initiative, which allows eligible students to spend a quarter or longer studying abroad on a DU Partner Program and receive benefits that help offset additional costs associated with studying abroad. More information on the Cherrington Global Scholars initiative, including a review of the benefits and qualifications, can be found at: http://www.du.edu/abroad/costs/cherrington.html.

The Cherrington Global Scholars initiative is an exciting opportunity for students and a dramatic statement of the University of Denver’s commitment to internationalizing undergraduate education. It reflects a campus-wide commitment—in curriculum development, financing, and academic programming—to fostering international study, research, and outreach.

Please visit http://www.du.edu/abroad/index.html for more details.

Transfer and International Education Reporting System

The University of Denver’s Transfer and International Education Reporting System (http://myweb.du.edu/mdb/du_bwcktart.P_DU_Choose_Geog_Area) (TIERS) allows students to access a list of approved transfer and study abroad courses. Courses that do not appear in the system are not necessarily unacceptable for transfer. Courses will continue to be added as new ones are evaluated and equivalents determined. You can access TIERS through PioneerWeb under the Student tab.
The Undergraduate Research Center (URC) provides support to students who wish to deepen their experience of learning by engaging in original research through several different programs. URC funds student research through the Partners in Scholarship Program (PinS) in which students can apply in partnership with a faculty member on campus to conduct research or systematically explore a creative topic toward making a new contribution to a body of literature. These funds often provide support for research for senior theses, in-depth exploration of a research question or topic, and faculty-student collaboration that can lead to new opportunities. URC also provides funding so students may disseminate findings of their research, most often at national or regional academic conferences, through the Student Scholar Travel Fund. URC hosts an annual showcase for student research and shares results with the DU community at the Undergraduate Research Symposium, held each spring. For more information on these programs, visit www.du.edu/urc or call 303-871-4301.
Other Academic Opportunities

Career Services

CAREER SERVICES

The DU career centers provide assistance for students and alumni in navigating the career planning and development process. Career Services offers individualized counseling and appointments, access to over 2,000 alumni through the Pioneer Career Network, employer networking contacts for career, employer and industry advice. Multiple online resources are available 24 hours a day, seven days a week, including extensive job and internship databases specifically for DU students and alumni.

Students and alumni have access to the following:

- one-on-one career advising
- hundreds of online resources containing information such as career options, graduate schools, salaries, jobs, internships and employers
- career assessments (free and fee-based)
- three annual career fairs highlighting jobs and internships
- assistance with self-branding and marketing, social media optimization, resumes, cover letters and mock interviews
- employers on campus for interviews, information sessions and events
- regular workshops and events that focus on numerous career topics as well as networking with alumni and employers

Current students and alumni are eligible for Career Services assistance. Visit our website at www.du.edu/career or call 303-871-2150 for an appointment.

INTERNSHIP PROGRAM

Internships offer an optional plan of study in which students combine courses with part-time or full-time work. A student may explore educational and career interests in areas such as business, communications, education, government, community agencies, industry or research. If a student seeks academic credit for an internship, the internship must be supervised by departmental faculty. Juniors and seniors are eligible for credit, and approval by the faculty advisor is required before registration or beginning the work experience. Students can view current internship opportunities through our online databases Pioneer Careers and the University Career Action Network (UCAN) at http://www.du.edu/career/jobs_internships/index.html.

Honors Programs

The University of Denver’s Honors Program fosters an intellectually engaged and vibrant community of students, staff and faculty. It promotes a distinctive broad and liberal arts education that challenges students to cultivate depth in critical and creative thought and facilitates students’ original contributions to intellectual life, their community and their chosen field. For information on admission to the Honors Program, go to www.du.edu/honors.

Honors Curriculum and Requirements

Once admitted, to remain active in the Honors Program, students must remain in good standing (p. 408) with the University, must respond to the annual opt-in email indicating their desire to continue in the program and must continue to make satisfactory progress towards satisfying honors requirements. To graduate with university honors, students must have a minimum 3.5 cumulative GPA, must take one honors course in the humanities, one in the social sciences, an approved sequence in the natural sciences, honors writing, an honors advanced seminar and two upper-level honors (HNRS) seminars. Students must also earn distinction in one major. Timing and requirements for entry and completion of distinction vary by department, so students must check with a major advisor. Go to www.du.edu/honors for details.

Honors Community and Enrichment

In addition to its academic opportunities, the Honors Program provides its community of students and faculty many ways to come together for co-curricular fun and enrichment. The Honors Program provides funds that enhance honors courses, sponsors a variety of activities throughout the year and partners with other groups on campus to host visiting scholars and to provide opportunities for community engagement. Honors students organize events of their own through the Voltaire Society. The Honors Program also supports its students through academic advising, acts as a clearinghouse for internship and research opportunities and provides funds for thesis research and materials.

Honors Floor

The honors floor is a residential opportunity designed primarily for first- and second-year students in the University Honors Program (acceptance to the program is a prerequisite for living on the honors floor). Those on the honors floor enjoy the company of bright, energetic students of diverse majors and interests who have made academic work a priority. They also have honors RAs who integrate honors activities in their programming.
While many honors students choose to live on the floor, those who are also members of LLCs live with their LLC, and some choose other housing based on roommate or building preference. Honors students are able to indicate their housing preference once their applications are complete. At that time, students who would like to live on the honors floor should notify the Honors Program.

For more information, contact the University Honors Program at www.du.edu/honors or 303-871-2035.

Lamont School of Music

Students do not have to pursue a music degree to be involved in activities at the Lamont School of Music. Performing ensembles are open to all DU students by audition, and rehearsals and concerts are held in the stunning Robert and Judi Newman Center for the Performing Arts. Ensembles include Lamont Chorale (MUEN 3712), Lamont Symphony Orchestra (MUEN 3760), Lamont Jazz Orchestra (MUEN 3751), Lamont Opera and Musical Theatre, Lamont Wind Ensemble (MUEN 3752), Lamont Jazz Ensemble (MUEN 3753), University Jazz Ensemble (MUEN 3754), Lamont Women’s Chorus (MUEN 3900), Lamont Men’s Choir (MUEN 3740), MUEN 3029 Steel Drum Ensemble, MUEN 3041 North Indian Classical Ensemble, Jazz and Commercial Music Combos and several chamber ensembles. Students may enroll in ensembles for credit or no credit. Musicians with school spirit may want to join the Pioneer Pep Band (MUEN 3720). Lamont offers more than 200 concerts a year including musicals, operas and prominent ensemble performances, as well as guest artist performances and recitals. Concerts are free for students.

Living and Learning Communities

A Living and Learning Community is a unique environment in which a select group of students shares common residential and academic experiences. DU’s Living and Learning Communities, which are exclusively for first-year students, center around five distinct areas: Creativity and Entrepreneurship, Environmental Sustainability, International issues, Social Justice and Wellness. Although each LLC has a specific thematic focus, students from any major or undeclared students can apply to become members. Each LLC has faculty and staff dedicated to the success of the program.

Creativity and Entrepreneurship Living and Learning Community (CELLC)

A one-of-a-kind academic experience, the Creativity & Entrepreneurship Living and Learning community empowers students to learn about the many challenges and rewards of creativity, the design thinking process, innovation, tackling societal problems, entrepreneurship, app development/programming, social entrepreneurship, and core business skills, ultimately creating commercial “products” and tackling social problems. The interdisciplinary community consists of students from all backgrounds and majors, and students collaborate to share ideas, discuss options, and work in teams to solve problems, while enhancing their own creative thinking. CELLC members take a two-credit course each quarter for the first year. The CELLC is an educational residential environment, housed in Centennial Towers. To learn more and apply, visit http://www.du.edu/livinglearning/entrepreneurship/.

Environmental Sustainability Living and Learning Community (ESLLC)

ESLLC students share an interest in learning more about environment-human interactions. Members take a two-credit course each quarter of the first year on a topic related to the environment, using the Rocky Mountain region as their classroom. All courses can go toward a minor in Sustainability which is offered through the Environmental Science program. Extracurricular events also contribute to the student’s experience. Weekend retreats, held throughout the year at places like DU’s Mount Evans Research Station or the Keystone Science School, allow students to get to know their peers better and expose them to a variety of environmental issues. The ESLLC is housed in a dedicated coed wing of Johnson-McFarlane Hall. There are 22 spaces available. To learn more and apply, visit www.du.edu/livinglearning/sustainability/.

International Living and Learning Community (ILLC)

The ILLC brings together American and international students who explore cultural and global issues. The community offers a variety of social, cultural and educational activities and provides the chance for formal and informal learning and exchange. To support academic goals, residents take a special two-credit course each quarter of the first year focusing on critical global issues. These classes can be applied toward the Intercultural Global Studies minor. The ILLC is an educational residential environment located on the second floor of Centennial Halls South. There are 34 spaces available. To learn more and apply, visit www.du.edu/livinglearning/international/.

Social Justice Living and Learning Community (SJLLC)

The SJLLC is designed for students committed to the study and practice of social justice. Each quarter of their first year at DU, SJLLC students take a two-credit course. These courses examine issues of social activism, social change and the philosophical foundations of justice. These classes can be applied toward the Intercultural Global Studies minor. Students are housed on a coed floor in Johnson-McFarlane Hall, and are involved in a number of activities together. In addition, students go on two different retreats, participate in city projects and attend guest lectures throughout the year. There is space available for 22 incoming first-year students. To learn more and apply, visit www.du.edu/livinglearning/social_justice.

Wellness Living and Learning Community (WLLC)

The WLLC is an environment where students explore various aspects of personal and community wellness. Students in this LLC take a two-credit course each quarter of the first year covering a multidimensional approach to health and wellness, which includes physical and mental wellness, spiritual and emotional wellness, and social and community wellness. For students with a strong desire to take their studies in Wellness to the next step, we offer an academic minor in Wellness. The LLC courses are the foundation for the minor. Additional programs include quarterly retreats, guest
speakers and community health-promotion projects. The Wellness LLC is an educational residential environment located on the third floor of Centennial Halls South. There are 28 spaces available. To learn more and apply, visit www.du.edu/wellness.

**Pioneer Leadership Program**

The Pioneer Leadership Program (PLP) offers an academic minor in leadership studies with a multidisciplinary approach. This comprehensive program involves a community living environment, a two-credit course each quarter, service learning, and international and intercultural experiences. It develops within its students an understanding of leadership theory, research, skills and competencies that support leadership effectiveness, a more fully developed code of personal ethics and an enhanced sense of social responsibility and citizenship. All students live together during their first year in Johnson-MacFarlane Hall, with an option to return the second year to the PLP floor of Nelson Hall. There are 88 spaces available for first-year students. To learn more and apply, visit www.du.edu/leadership.

**Vicki Myhren Gallery**

The Vicki Myhren Gallery is the principal exhibition venue of the School of Art & Art History and is integral to the school’s educational mission. It provides a physical and programmatic home of exhibitions and interdisciplinary programs that explore the visual arts and the language of images. Its exhibitions feature artistic achievements from the school, region, nation and around the world.
Student Life

Student Life serves the public good by creating a dynamic environment that fosters student learning, inspires ethical and caring behavior, champions respect for difference and cultivates self-awareness and wellness.

Student Life areas include the following:

- Academic Resources (centralized Academic Advising and Discoveries Orientation, Disability Services and the Learning Effectiveness Program)
- Campus Life (Student Conduct, Student Activities and Greek Life, Student Outreach and Support, Parent and Family Relations and the Driscoll Student Center)
- Career Services
- Housing and Residential Education
- Health and Counseling
- University Chaplain

To learn more about Student Life, visit http://www.du.edu/studentlife/.
Student Conduct

Student Conduct supports the University and Student Life missions by providing programs and services designed to foster a positive and safe environment for student learning. Student Conduct strives to achieve a campus community in which individuals

- demonstrate respect for others, for themselves and for the University;
- uphold high standards of personal and academic integrity;
- are accepting of differences and gain an appreciation for living in a pluralistic society;
- understand the impact of their behavior both upon the University and the surrounding Denver community;
- freely accept the responsibility for and consequences of their conduct; and
- seek opportunities to repair harm that they caused through a restorative process.

Student Conduct houses the honor code, which includes the expectations for behavior for all community members—students, staff, faculty, administrators and the trustees. The Student Conduct Process and Policies outlines student behavior contrary to the honor code, along with the process for how violations of such policies will be resolved.

The Student Conduct staff is available to answer questions and address concerns about these areas of responsibility. Call 303-871-3111 or visit www.du.edu/studentconduct for more information.

Honor Code

The University of Denver is an honor code school. All community members—students, staff, faculty and administrators—are held to the same expectations as outlined in the honor code.

Honor Code Statement

All members of the University of Denver are expected to uphold the values of integrity, respect, and responsibility. These values embody the standards of conduct for students, faculty, staff and administrators as members of the University community. Our values are defined as

- **Integrity**: acting in an honest and ethical manner;
- **Respect**: honoring differences in people, ideas and opinions;
- **Responsibility**: accepting ownership for one’s own conduct.

For further details on the honor code, please see www.du.edu/studentlife/studentconduct.

Pioneer Pledge

The Pioneer Pledge was created in 2010 as an action statement for the Honor Code. The Pioneer Pledge is as follows:

As a University of Denver Pioneer, I pledge

- to act with integrity and pursue academic excellence;
- to respect differences in people, ideas and opinions; and
- to accept my responsibility as a local and global citizen.

Because I take pride in the University of Denver, I will uphold the honor code and encourage others to follow my example.

Student Conduct

Committed to helping ensure that a positive and safe learning environment exists at the University, Student Conduct promotes the honor code and addresses violations by students. For more information on the Student Conduct policies and procedures, please visit www.du.edu/studentlife/studentconduct.

Academic Misconduct

Academic misconduct includes, but is not limited to

- Plagiarism, including any representation of another’s work or ideas as one’s own in academic and educational submissions.
- Cheating, including any actual or attempted use of resources not authorized by the instructor(s) for academic submissions, and/or any actual or attempted effort to assist another student in cheating.
- Double submission, including any submission of an academic work for more than one course without expressed permission.
• Fabrication, including any falsification or creation of data, research or resources to support academic submissions.

When it appears that academic misconduct has occurred, the faculty member and/or academic unit has the authority under the honor code to address the violation and take academic action as deemed necessary and appropriate. As expected by the honor code, faculty members/academic units have an obligation to report such violations to Student Conduct for a University-level review and investigation.

Academic actions can range from receiving a zero/failing grade on the individual assignment/test up to receiving a failing grade in the course. Academic units also have the authority to remove a student from his or her academic unit.

For more information about the Student Conduct Policies and Procedures, please see http://www.du.edu/studentlife/studentconduct.
Student Information and Records

Maintaining Contact Information

Address Information

Enrolled students must provide the University with a valid mailing address and are responsible for communications sent to that address. If correct address information is not maintained, students may not receive grades, bills or graduation mailings. The University is not responsible if payment of tuition and fees is not made because a student did not receive a billing notice. Students may be assessed a late fee if payment is not received by the due date printed on the bill. Additionally, the University must know how to contact students in case of an emergency.

Students unable to make address changes online can pursue the following options:

- Visit the Registrar’s Office on the garden level of University Hall or download the Address/Phone/Email Change Request form from http://www.du.edu/registrar.
- Send an email to registrar@du.edu; include student number and indicate which address or addresses are to be changed. (See following address types.)
- Call 303-871-4095. (For security reasons, students are asked to give identifying information.)
- Send a fax to 303-871-4300. (Include student number, month and date of birth, and indicate which address types are to be changed.)

Types of Addresses

Most people will have only one or two addresses in the DU system. “Mailing” is the default address that we use for most purposes. The other address types in the following list may be entered if you have different addresses you wish us to use for different purposes. Alumni may select any address type as preferred for correspondence:

- **Mailing**: This is the default address used by DU. All constituents should have a correct mailing address.
- **Billing**: Used only if you wish your tuition bill to be sent to a different address from your mailing address.
- **Business**: Your place of work. For DU employees, this will be your office address.
- **Grades**: Provide an address if you have requested grades to be mailed and wish them to be sent to a different address than your mailing address.
- **Home**: Used to distinguish a permanent (family) address for students from out of the area or a home address for alumni. International students and employees (visa classes F, M and J) must maintain a valid foreign address in this field.
- **On-Campus**: Used only for University housing addresses. It is populated automatically each term.
- **Parents**: DU can maintain up to two addresses for parents.
- **Seasonal**: Used to override your permanent mailing address for certain times each year—e.g., a summer house.
- **Temporary**: Used to override your permanent mailing address for a single specified period.

Telephone Numbers

Students can enter several different types of telephone numbers in their student account: permanent home, business, cell, fax and local (if different from permanent home). Indicate the type and whether the number should be added or deleted on the front of the form. If checked as “unlisted,” the telephone number will only be released to University officials.

E-Mail Addresses

The University uses email to contact students with official University communication including academic- and business-related items. Enrolled students must provide the University with a valid email address and are responsible for communications sent to that address. Students may update email address information by clicking the Personal Information link found under the myWeb (http://myweb.du.edu) tab of PioneerWeb (https://PioneerWeb.du.edu).

Educational Records Rights and Privacy

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An “eligible student” under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include the following:

1. The right to inspect and review the student's education records within 45 days after the day the University receives a request for access. A student should submit to the registrar a written request that identifies the record(s) the student wishes to inspect. Request forms are available from the registrar. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the registrar shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed and specify why it should be changed. If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and the student’s right to a hearing
regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before the University discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent. The University discloses education records without a student's prior written consent under the FERPA exception for disclosure to University officials with legitimate educational interests. A University official is a person employed by the University in an administrative, supervisory, academic, research or staff position (including law enforcement unit personnel and health staff; a person serving on the board of trustees; or a student, volunteer or employee of a partner organization serving on an official committee, such as an admission, disciplinary or grievance committee, or assisting another University official in performing his or her tasks. A University official also may include a contractor outside of the University who performs an institutional service or function for which the University would otherwise use its own employees and who is under the direct control of the University with respect to the use and maintenance of PII from education records, such as an attorney, auditor or collection agent or a student volunteering to assist another University official in performing his or her tasks. A University official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her institutional duties.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC  20202-4605

Directory Information

The law provides that “directory information” may be released without the consent of the student. The University of Denver designates the following student information as “directory information:"

• The student’s name, addresses, telephone numbers, electronic mail and webpage addresses, employer, job title, photographic images, date and place of birth, field of study, full-time or part-time status, class (e.g., graduate, sophomore, junior), participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, anticipated date of graduation, degrees and awards received, thesis and dissertation titles and the most recent previous educational agency or institution attended by the student.

Students may prevent the University from disclosing directory information by submitting a “Request to Prevent Disclosure of Directory Information” form (available from the Office of the Registrar) to the Office of the Registrar, University Hall, G33.

Disclosure

Students may authorize the University to share information from education records with third parties such as parents. Authorizations may be completed online or by completing an authorization form available in the Office of the Registrar.

FERPA permits the disclosure of PII from students' education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to University officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information and disclosures to the student, §99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose PII from the education records without obtaining prior written consent of the student to the following entities or for the following purposes:

- University officials, including faculty, within the University whom the University has determined to have legitimate educational interests. This includes contractors, consultants, volunteers or other parties to whom the University has outsourced institutional services or functions, provided that the conditions listed in §99.31(a)(1)(i)(B)(f)-(a)(1)(i)(B)(2) are met. (§99.31(a)(1))
- Authorized representatives of the U. S. Comptroller General, the U. S. Attorney General, the U.S. Secretary of Education or State and local educational authorities, such as a State postsecondary authority that is responsible for supervising the University’s State-supported education programs. Disclosures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of Federal- or State-supported education programs or for the enforcement of or compliance with Federal legal requirements that relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation or enforcement or compliance activity on their behalf. (§§99.31(a)(3) and 99.35)
- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid or enforce the terms and conditions of the aid. (§99.31(a)(4))
- Organizations conducting studies for, or on behalf of, the University, in order to (a) develop, validate or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§99.31(a)(6))
- Accrediting organizations to carry out their accrediting functions. (§§99.31(a)(7))
- Parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(a)(8))
- To comply with a judicial order or lawfully issued subpoena. (§99.31(a)(9))
• To appropriate officials in connection with a health or safety emergency, subject to §99.36.  (§99.31(a)(10))
• With information the University has designated as “directory information” under §99.37.  (§99.31(a)(11))
• A victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding.  (§99.31(a)(13))
• The general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the University determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the University’s rules or policies with respect to the allegation made against him or her.  (§99.31(a)(14))
• Parents of a student regarding the student’s violation of any Federal, State or local law, or of any rule or policy of the University, governing the use or possession of alcohol or a controlled substance if the University determines the student committed a disciplinary violation and the student is under the age of 21.  (§99.31(a)(15))

As of January 3, 2012, the U.S. Department of Education’s FERPA regulations expand the circumstances under which a student’s education records and PII contained in such records—including Social Security Number, grades, or other private information—may be accessed without the student’s consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education or state and local education authorities (“Federal and State authorities”) may allow access to student records and PII without consent to any third party designated by a Federal or State authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is “principally engaged in the provision of education,” such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to a student’s education records and PII without the student’s consent to researchers performing certain types of studies, in certain cases even when the University objects to or does not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State authorities may collect, compile, permanently retain and share without the student’s consent PII from education records, and they may track participation in education and other programs by linking such PII to other personal information about the student that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service and migrant student records systems.

Additional Information
Questions about these policies and procedures may be directed to the Office of the Registrar at 303.871.3897. Request forms and additional information are available on the web at www.du.edu/registrar or in the Office of the Registrar at 2197 South University Blvd., room G33, Denver, Colorado 80208.

Transcripts
A transcript is an official copy of a student’s academic record showing the student’s academic status at the time it is issued. The official transcript includes the complete academic record of courses taken at the University of Denver. Transcripts may be ordered online, by mail or fax, or in person at University Hall, garden level in the main hall. Transcripts require one to two working days of processing time. To order official transcripts online, log in to PioneerWeb (https://PioneerWeb.du.edu) and click on the Student Records link. A credit card is needed to complete online orders. To order transcripts by mail or fax, a signed request is required along with payment in the form of cash, check or money order. An email request is NOT accepted. Requests should include the following:

• full name
• name changes
• dates of attendance
• DU student number
• Social Security number
• date of birth
• address and phone number
• payment by cash, check or money order (credit cards only accepted for online orders)
• complete address, with no abbreviations, where transcripts are to be sent
• signature

Send written transcript requests to

University of Denver
Office of the Registrar
2197 S. University Blvd.
Denver, CO 80208-9405
Attn: Transcripts
Official transcripts are NOT ISSUED until ALL OUTSTANDING ACCOUNTS with the University are paid. Students may check for current holds at PioneerWeb (https://PioneerWeb.du.edu). The registrar does not hold transcripts pending change of grade. “Issued to Student” is stamped on official transcripts sent to or picked up by students.

Unofficial transcripts or transcripts from Colorado Women’s College/Temple Buell are also available through this method.

Contact Information
For transcript information and status inquiries, call 80208-9405.
Leave of Absence and Withdrawal from the University

Withdrawal

Students who no longer wish to be enrolled in courses for a term may withdraw from the University of Denver. Withdrawal may be for a single term or can be used when the student wishes to stop pursuing a degree with the University. Questions about the withdrawal process should be directed toward the student's registration office.

Leave of Absence

A leave of absence is taken when a student wishes to take time off from his or her studies. Questions about the leave of absence process should be directed toward the student's advising office (p. 392).

Official Withdrawal

Official Withdrawal

A student officially withdraws from the University by notifying their program's registration office (p. 395) of the intent to withdraw. Students may also submit notification of their intent to withdraw online. University College students must submit an official withdrawal form to the University College Student Support Center and meet with a University College academic advisor if dropping all courses for the quarter.

After following due process, a University official may administratively withdraw a student for academic or disciplinary reasons, such as the following:

- academic suspension (mandated leave of absence)
- academic dismissal
- disciplinary suspension (mandated leave of absence)
- disciplinary dismissal (permanent dismissal from the University)

Official Withdrawal Guidelines

Students who are contemplating withdrawal should read the withdrawal information sheet and checklist available from their program's registration office. Students who enroll in classes prior to the beginning of a quarter and do not intend to attend those classes are responsible for notifying their registration office of their intentions to withdraw so that classes will be dropped. The effective date of withdrawal is the date that the office is notified. See www.du.edu/registrar for the tuition and fee refund schedule.

After dropping all classes, students are encouraged to apply for the leave of absence program at the Center for Academic and Career Development. Forms are available at the center's website: www.du.edu/thecenter. Students cannot completely withdraw from all classes via the Web. Unofficial withdrawal (nonattendance) may result in grades of “F” and outstanding tuition charges for courses for which the student is registered.

Students who have received federal or state funds through financial aid programs must also have an exit interview with the Office of Financial Aid. Refer to the financial aid section of this bulletin, the financial aid website at www.du.edu/finaid or contact the Office of Financial Aid for up-to-date information regarding financial aid withdrawal processes.

Official withdrawal during the second through sixth week of the quarter (automatic withdrawal period) results in the recording of grades of “W” for all courses. A grade of “W” is not calculated in the student’s GPA. Courses dropped before the end of the first week of the quarter are deleted from the student's record. Students withdrawing after the deadline for automatic “W” (after the sixth week) require approval from instructors and Academic Resources. An instructor has the authority to refuse a drop if the student is failing the course.

Unofficial Withdrawal

Unofficial Withdrawal

An unofficial withdrawal occurs when a student ceases to attend classes and does not make official notification of the withdrawal. Students who earn all non-passing grades for an enrolled term are, for financial aid purposes, considered unofficially withdrawn for the term. Students who unofficially withdraw (stop attending classes or earn all non-passing grades) for a given term will have their financial aid adjusted according to federal, state and institutional regulations:

- Non-attendance: Student enrolls but does not attend—may result in grades of “F” and outstanding tuition charges for courses for which the student is registered.
- Inactive status: Student does not enroll for one or more terms and loses automatic registration eligibility.
Medical Leave of Absence

A student with a serious medical condition may elect to withdraw and take a leave of absence from the University with appropriate medical documentation. Circumstances under which this procedure is appropriate and the procedures the student must adhere to follow.

Study Abroad

For students participating in a study abroad program, the medical leave of absence program is not an option for you during the term abroad. The medical leave of absence is a program for students who are attending classes on the University of Denver's campus. Study abroad participation involves additional institutions both administratively and financially, and the University of Denver is unable to dictate policies to other institutions.

Withdrawal Procedures

Please note: Once a medical leave of absence is approved, students cannot withdraw their request.

For the purpose of this policy and procedure, the term “medical” or “health” includes both physical and mental health conditions.

1. Leave of absence and withdrawal: these terms both refer to a process by which a student officially withdraws from the University. The leave of absence program assumes that the student will be returning to the University within four quarters, though the student is not obligated to do so. The withdrawal program assumes that the student will not be returning, though the student may do so if otherwise eligible.

2. Any course that is dropped after the first week of the quarter will result in a notation designating a withdrawal ("W") on the student's transcript regardless of the reason for the drop. A withdrawal notation ("W") is an appropriate registration status indicating that a student withdrew after the first week of the quarter. The "W" grade notations are not factored into a student's GPA.

3. The simple diagnosis of a medical condition may not warrant a medical leave of absence. However, if the student is able to document the presence of a medical or mental health condition along with significant functional impairments that warrant withdrawing from all courses for the term, a medical leave of absence may be approved.

   • The University will expedite the withdrawal process and grant an automatic tuition refund for any funds paid out of pocket
   • In general, it is expected that students experiencing serious health conditions will seek medical care and request a medical leave of absence before the end of the sixth week and/or before the end of 60-percent completion of the term. In exceptional circumstances, if there is documented evidence of a medical or mental health emergency or a significant exacerbation of symptoms, students may request a medical leave of absence by the last day of classes.
   • If the withdrawal occurs after the last day of the term the student must complete an exception to academic policy. The student will request a retroactive drop of all courses for that quarter due to medical reasons. In general, it is expected that the student will have evidence of having proactively sought healthcare during the term in question. The same requirements for medical documentation apply through this process.

4. If able to do so, the student should complete the medical leave of absence form. If the student is unable to complete the form, an academic advisor may do so, at the discretion of the associate vice chancellor for student life, the executive director of academic resources or their designee. An email request to complete the form by the student or the parent/guardian, if the student is unable to, should be sent to advising@du.edu. The email should include the student's id number.

5. A request for a medical leave of absence or medical withdrawal must be accompanied by appropriate medical documentation to support the student’s request. Documentation must include the information identified below. Complete medical records are neither required nor desired:

   • Documentation must be submitted by an appropriately licensed medical or mental health provider on letterhead from that provider’s facility. The provider’s license number should be clearly evident somewhere in the documentation.
   • Documentation must include the date that the student first consulted the provider, the number of visits with that provider, and the approximate date that the provider believes the symptoms first began.
   • Documentation must clearly state the diagnosis, the symptoms, and explicitly state the functional impairments which inhibit the student from attending classes and/or completing coursework. For instance, simply stating that a student is depressed does not support a medical leave of absence.
   • Documentation must outline the treatment recommendations and the estimated length of the treatment plan. If the provider has an estimation of when the student might be able to return to the University, that information can be included as well. Please note: Students must also complete a HIPAA-compliant consent form with their healthcare provider to give permission to the University’s Health and Counseling Center and Student Life for release of the information by the provider. Students get this form from their treating provider.
   • Information provided to the University as part of a medical leave of absence will be considered confidential and will be released only in...
circumstances described by the Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act of 1996 (HIPPA).

6. If the medical leave of absence is approved, Academic Resources will notify relevant departments that the student is withdrawing for medical reasons:
   - Faculty
   - Office of the Registrar
   - Student Financial Services
   - Health and Counseling Center
   - Housing and Residential Education (if the student has on-campus housing).
   - Office of Financial Aid (if the student has financial aid)
   - University Technology Services (if the student has borrowed a laptop computer)
   - International Student and Scholar Services (if the student is an international student)
   - Office of Student Outreach and Support

7. The student will be responsible for meeting all financial obligations to the University by published deadlines. Failure to do so could mean that the student would not be eligible to register and/or to have transcripts/diplomas released until the obligation has been met.

8. For a student whose condition is so severe that return to the University is unlikely, the University may initiate withdrawal procedures, at the discretion of the person with the student’s power of attorney or the associate vice chancellor for student life, executive director of academic resources or their designee.

9. A student may request a medical leave of absence a total of two times during an undergraduate career at the University. If extenuating circumstances exist, or as an Americans with Disabilities Act reasonable accommodation, the student may request additional medical leaves of absence, at the discretion of the associate vice chancellor for student life, executive director of academic resources or their designee.

10. Students who are approved for a medical leave of absence will have notations designating a withdrawal ("W") a registration status indicating the student withdrew from courses, recorded for their courses for the term. The "W" grade notations are not factored into a student's GPA.

Tuition Refund

Tuition and fee refunds will be prorated. A student will be responsible for the tuition for all full weeks of attendance. Proration will begin after the 100% drop/add period published by the Registrar’s Office. Each subsequent week for the standard ten-week quarter will result in a 10% reduction of the refund amount. For instance, if a student begins leave in week three they are eligible for a 70% refund. For other interterms and summer term refunds will be determined based on the term length and course start date. Refunds will be based on the last date of attendance in an academically-related activity in combination with the date the condition was officially recognized by a healthcare provider. Please note: withdrawing prior to week six may impact a student's federal financial aid award, please contact the Office of Financial Aid for more information.

On-Campus Housing

Students who live in the residence halls need to schedule a time to officially move out of the residence halls if they submit and are approved for a medical leave of absence. Students cannot live in the residence halls if they are not enrolled in classes. Once the medical leave of absence is approved, housing charges are pro-rated from the time of the official check-out.

Health Insurance Information

All degree-seeking students who are enrolled for one or more hours of graded credit and who are actively attending classes or completing other required course work toward a degree, are eligible to purchase the Student Health Insurance Plan currently underwritten by United Healthcare Student Resources (UHCSR). The policy offered by UHCSR requires that students must actively attend classes for at least the first 31 days after the date for which coverage is purchased. If a student becomes ill during the first month of classes and needs to withdraw as a result of a serious health issue, the University can request that the student's coverage be continued until the end of the coverage period. Home study, correspondence, Internet and television courses do not fulfill the eligibility requirements that the student is actively attending classes. UHCSR maintains its right to investigate student status and attendance records to verify that the policy eligibility requirements have been met. If the UHCSR discovers the eligibility requirements have not been met, its only obligation is to refund premium.

Returning to the University

1. As a condition of accepting a medical leave, before the student’s return to the University, the student agrees to:
   - Obtain appropriate medical treatment.
   - Submit medical documentation from an appropriate health care provider to the executive director of academic resources a minimum of six weeks prior to the quarter for which the student plans to return.
   - The documenting letter must be signed, dated, and on the healthcare provider’s letterhead addressing every item in the healthcare questionnaire (http://www.du.edu/studentlife/advising/media/treatinghealthcareprofessionalform.pdf).
Students Called for Military Duty

Introduction
The University of Denver supports students called to active duty in the armed services by providing academic support, tuition relief and refunds, and by allowing the reinstatement of students whose documented service in the uniformed services has required their sudden withdrawal or prolonged absence from their enrollment at the institution. This includes service in the uniformed services whether voluntary or involuntary and being on active duty in the Armed Forces, including such service by a member of the National Guard or Reserve. When a DU student is under call or ordered to active duty, the following provisions will apply.

Purpose
This guideline offers suggestions for ways in which academic and administrative units and faculty may assist students who are called to active military duty.

Student Responsibility
A DU student who receives orders calling him/her to report for active military duty should provide a copy of those orders (including the date in which the orders were made and the “reporting date”) to the Coordinator of Military Programs in the Office of the Registrar. The Coordinator of Military Programs will provide a copy of the orders and written official leave of absence request (if applicable) to the Office of Graduate Studies or Office of Undergraduate Academic Resources and the Office of Financial Aid, if the student has a scholarship or other financial aid. The Coordinator of Military Programs will notify the faculty members in all courses in which the student is enrolled and will assist with arrangement of course completion options and a written official leave of absence (if needed). It is generally the student’s responsibility to work directly with faculty members to determine appropriate course completion options. NOTE: Should the student not be capable of providing a copy of such orders to the Coordinator of Military Programs due to the immediacy of the military assignment, s/he must submit official orders (1) upon return to school, or (2) while on duty. The University can only consider requests for changes to grades or tuition charges with official military orders. The University will make appropriate changes to the student’s records once the official orders are submitted.

Course Completion Options
- Faculty are urged to work with a student who has received military orders to enable the student to complete the coursework whenever it is reasonably feasible for the student to do so.
- If a student receives military orders for an extended period of time and it is highly likely that the student will miss most of the class sessions in the course, the student would be well advised to drop the course.
- If the student receives military orders late in the term, faculty members may offer the student the option of an incomplete if such an option is academically appropriate.

Readmitted Students

Readmitted Students
A traditional student in academic good standing who withdraws from the University for one or more quarters (except summer session) but fewer than five calendar years must submit an Application for Re-Entry to the Center for Academic and Career Development and official transcripts of any college study completed during the time of absence to the Registrar’s Office.
Colorado Women's College must contact Colorado Women's College Student Support Services for information on re-entry. Traditional bachelor's program students who have not been enrolled at the University for more than five calendar years from their last term of enrollment must reapply for admission to the University through the Office of Undergraduate Admission. University College students must contact the University College Student Support Center for information on re-entry. Students who are accepted for readmission may choose to complete their degree under the requirements of their original DU bulletin or the current bulletin.

**Leave of Absence Program**

The DU Leave of Absence Program allows students to take a leave of absence for up to one academic year. By enrolling in the program, students officially withdraw from the University. However, if students return within four academic quarters, they are readmitted and allowed to register for classes during priority registration. One quarter before the scheduled return, registration materials are mailed to the address specified on the leave of absence application. After completing the Application to Re-Enter, the student is then eligible to register. Stop-Out forms for traditional undergraduates are obtained from the Center for Academic and Career Development or online at www.du.edu/studentlife/advising. Students who wish to go on leave during a quarter in which they are enrolled must contact the Office of the Registrar to drop their classes. University College students must contact the University College Student Support Center for information on Leave of Absence and re-entry.
Graduation Policies

Application for Graduation

An applicant for any undergraduate degree must file an application for graduation (http://www.du.edu/registrar/graduation/graduationapp.html) at least three quarters before the intended quarter of graduation. The final responsibility for completing graduation requirements rests with the student.

Requirements for Graduation

- A student must complete the degree requirements listed in the bulletin in effect at the time he or she is admitted as degree-seeking student at the University.
- Students must earn a minimum GPA of 2.0 with the exception of the bachelor of science in accounting which requires a minimum GPA of 2.5.
- Any departure from degree requirements must be approved by the Academic Exceptions Committee.
- Any non-final grade (i.e., incomplete or non-reported grade) must be changed to a final grade.

Residence Requirement

- The last 45 credits earned prior to granting a degree must be completed at the University of Denver apart from approved study abroad participation.
- Students who take classes at another institution while on leave must submit transcripts upon their return to the University.
- Regardless of the degree requirements (coursework and credits) satisfied by the transfer work, the 45-quarter-hour residency requirement must also be satisfied.

Class Attendance

A graduating senior must attend classes through the last scheduled session of the quarter unless the instructors approve the absence.

Commencement

Commencement Ceremonies

Four formal commencement ceremonies are held at the University of Denver each year:

- At the conclusion of the spring semester, a commencement ceremony is held for the Sturm College of Law.
- At the conclusion of the spring quarter, separate ceremonies are held for undergraduate and graduate students.
- At the conclusion of the summer quarter and summer semester, a commencement ceremony is held for all summer graduates.

Students who have completed all graduation requirements during the autumn or winter terms, or will complete all graduation requirements during spring term of the current academic year, are invited to participate in the spring ceremonies.

Students who will complete all graduation requirements during the summer quarter or semester are invited to participate in the summer ceremony.

Walking in the ceremony

Under some circumstances, students who have not met graduation requirements are allowed, by petition, to participate (walk) in commencement exercises. Students may request to walk in the commencement ceremony.

For additional information about eligibility to walk in the commencement ceremony, please see Undergraduate Request to Walk in Commencement Ceremony (http://www.du.edu/registrar/media/documents/commencementwalkrequest.pdf) (PDF) or Graduate Request to Participate in Ceremony (http://www.du.edu/media/documents/graduates/walking.pdf) (PDF).

Commencement Program

The commencement program lists the names of all graduation candidates who applied at the appropriate time to receive degrees at that specific commencement ceremony. The appearance of a name in the program does not guarantee a student’s graduation at that time unless all degree requirements have been completed.

Diplomas

Diplomas

Diplomas are issued eight to ten weeks after the conclusion of the term in which the student graduates and after all holds are cleared.
Diploma Name Policy

The student name listed on a diploma or certificate must match the official name on file at the University (first name, middle name, last name), with the following exceptions:

- option of first name or initial
- option of diminutive or alternate form for the first name
- omission of the first name when the middle name is used as a salutary name
- option of middle name or initial
- omission of the middle name
- inclusion of former or maiden name(s)
- inclusion of proper capitalization and accentuation of name
- inclusion of Hispanic maternal surnames

Neither titles nor degrees previously earned will be included as part of a graduate’s name on a diploma.

Dean’s Honor List and Hornbeck Scholars

To be eligible for the Dean’s Honor List, a student must achieve a quarterly grade point average of at least 3.75 with 15 earned quarter hours or more. A student who earns a quarterly GPA of 4.0 with a minimum of 12 earned quarter hours is named a Hornbeck Scholar, in memory of Stanley K. Hornbeck’s outstanding service and scholarship to the University. (Hornbeck received his bachelor’s degree from DU in 1904 and became the first Rhodes Scholar from Colorado. He later served the United States as ambassador to the Netherlands.)

A student who achieves a 4.0 quarterly GPA and takes 15 quarter hours or more is recognized on the Dean’s Honor List and as a Hornbeck Scholar. Dean’s List and Hornbeck Scholars are noted on students’ transcripts as “Dean’s List.” Academic standing and Dean’s List calculations are made at the end of grade processing. Standing is not recalculated with subsequent changes of grades (e.g., late grade submissions or makeup of incomplete grades).

Degrees with Honors

Latin Honors

Honor designations for baccalaureate degrees are cum laude, magna cum laude and summa cum laude.

- Cum laude is awarded to a degree candidate who has completed at least 90 quarter hours at the University with a minimum GPA of 3.75 in all course work taken at DU. For candidates with fewer than 90 quarter hours, cum laude is awarded if the student received a recommendation from the major department and if he or she achieved a minimum GPA of 3.75 at the University.
- Magna cum laude is awarded to a degree candidate who has completed at least 90 quarter hours at the University with a minimum GPA of 3.85 in all course work taken at DU. A candidate for this honor must present a thesis or project, or receive distinction in his or her major. For candidates with fewer than 90 quarter hours, magna cum laude is awarded if the student received a recommendation from the major department and if he or she achieved a minimum GPA of 3.85 at the University.
- Summa cum laude is awarded to a degree candidate who has earned a minimum of 90 quarter hours at the University with a minimum GPA of 3.95. A candidate for this honor must present a thesis or project, or receive distinction in his or her major. For candidates with fewer than 90 quarter hours, summa cum laude is awarded if the student received a recommendation from the major department and if he or she achieved a minimum GPA of 3.95 at the University.

University Honors

University Honors Program (p. 417) students who successfully complete honors course requirements along with distinction in their major are recognized upon graduation with both university honors and distinction in the major.

Distinction in the Major

Most departments offer recognition in the form of distinction in the major. These programs typically include special course requirements and completion of a senior thesis or project. Timing and requirements for entry and completion vary by department, so students should contact a major advisor for details. Graduation with university honors requires completion of distinction in the major, but students not in the University Honors Program can earn distinction in most departments as well.
Honor Societies

Beta Gamma Sigma

Beta Gamma Sigma is the honor society serving business programs accredited by AACSB International, the Association to Advance Collegiate Schools of Business. Membership in Beta Gamma Sigma is the highest recognition a business student anywhere in the world can receive in a business program accredited by AACSB International. The University of Denver chapter is among the oldest BGS chapters, founded as number 19 in 1926.

Phi Beta Kappa

Phi Beta Kappa, Gamma of Colorado chapter elects a small number of juniors and seniors each year to membership in North America’s oldest and most prestigious academic honor society. Membership is by election only and is based on a high level of academic performance, broad course distribution across the liberal arts and sciences and a sustained, demonstrated commitment to intellectual curiosity and the spirit of a liberal arts education.

Honor Societies

There are many additional honor societies open to students at the University. Students should consult with their major advisor or department for information about other honor societies specific to their discipline.
# Index

## A
- About DU ................................................................. 7
- About This Bulletin .................................................. 6
- Academic Advising ................................................... 392
- Academic Advising for Traditional Programs ............. 392
- Academic Calendar .................................................. 19
- Academic Misconduct .............................................. 421
- Academic Standards and Grading ............................ 408
- Academic Support .................................................... 412
- Accreditation .......................................................... 7
- Admission .............................................................. 29
- Admission .............................................................. 29
- Admission .............................................................. 50
- Advanced Seminar .................................................. 62
- Air Force Aerospace Studies .................................... 69
- Army Reserve Officers' Training Corps (AROTC) .... 77
- Asian Studies .......................................................... 90
- Attendance .............................................................. 20
- Authorization and Disclosure ................................... 8

## B
- Bachelor of Arts ......................................................... 29
- Bachelor of Arts ......................................................... 38
- Bachelor of Arts ......................................................... 52
- Bachelor of Arts Completion Program Degree Requirements ......................................................... 51
- Bachelor of Business Administration ....................... 29
- Bachelor of Music ...................................................... 39
- Bachelor of Science ................................................... 40
- Bereavement Policy .................................................. 20
- BFA Degree Requirements ......................................... 38
- BSAcc Degree Requirements ..................................... 41
- BSBA Degree Requirements ....................................... 43
- BSCh Degree Requirements ....................................... 46
- BScpE Degree Requirements ..................................... 47
- BSEE Degree Requirements ...................................... 47
- BSME Degree Requirements ..................................... 48
- Business ................................................................. 58
- Business & International Studies Advising ................. 392
- Business Administration .......................................... 111

## C
- Campus Weather Closures ........................................ 21
Index

Center for Community Engagement and Service Learning ................................................................. 414
Colorado Women’s College .................................................................................................................. 29
Colorado Women’s College .................................................................................................................. 58
Colorado Women’s College Academic Calendar ............................................................................... 21
Colorado Women’s College Advising ............................................................................................... 392
Commencement .................................................................................................................................. 432
Common Curriculum .......................................................................................................................... 58
Common Learning Experience ........................................................................................................... 377
Communication ................................................................................................................................. 58
Communication Arts ......................................................................................................................... 380
Concurrent and Second Baccalaureate Degree ............................................................................... 49
Course Information ........................................................................................................................... 398
Course Registration ............................................................................................................................ 396
Credit Earned through Examinations ............................................................................................... 53
Critical Incident Notification Systems ............................................................................................... 423

D
Dean’s Honor List and Hornbeck Scholars ....................................................................................... 433
Degree Audit ....................................................................................................................................... 394
Degrees and Degree Requirements .................................................................................................... 29
Degrees and Degree Requirements .................................................................................................... 32
Degrees and Programs of Study .......................................................................................................... 24
Degrees with Honors .......................................................................................................................... 433
Department of Anthropology ............................................................................................................ 70
Department of Biological Sciences .................................................................................................... 93
Department of Business Ethics and Legal Studies ............................................................................. 256
Department of Business Information and Analytics ......................................................................... 112
Department of Chemistry and Biochemistry ..................................................................................... 116
Department of Communication Studies ............................................................................................. 128
Department of Computer Science ....................................................................................................... 135
Department of Economics .................................................................................................................. 141
Department of English ....................................................................................................................... 179
Department of Finance ....................................................................................................................... 186
Department of Geography and the Environment .............................................................................. 193
Department of History ....................................................................................................................... 206
Department of Languages and Literatures ......................................................................................... 237
Department of Management ............................................................................................................. 258
Department of Marketing .................................................................................................................... 261
Department of Mathematics .............................................................................................................. 266
Department of Media, Film and Journalism Studies .......................................................................... 270
Department of Philosophy ................................................................................................................. 310
Department of Physics and Astronomy .............................................................................................. 317
Department of Political Science ......................................................................................................... 326
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judaic Studies</td>
<td>232</td>
</tr>
<tr>
<td>Lamont School of Music</td>
<td>280</td>
</tr>
<tr>
<td>Law and Society</td>
<td>58</td>
</tr>
<tr>
<td>Leadership and Organization Studies</td>
<td>387</td>
</tr>
<tr>
<td>Leadership Studies</td>
<td>58</td>
</tr>
<tr>
<td>Leadership Studies Program</td>
<td>254</td>
</tr>
<tr>
<td>Leave of Absence and Withdrawal from the University</td>
<td>427</td>
</tr>
<tr>
<td>Major and Minor Requirements and Course Descriptions</td>
<td>57</td>
</tr>
<tr>
<td>Medical Leave of Absence</td>
<td>428</td>
</tr>
<tr>
<td>Official Withdrawal</td>
<td>427</td>
</tr>
<tr>
<td>Other Academic Opportunities</td>
<td>417</td>
</tr>
<tr>
<td>Pre-Professional Programs</td>
<td>393</td>
</tr>
<tr>
<td>Procedure for Grade Appeals</td>
<td>410</td>
</tr>
<tr>
<td>Readmitted Students</td>
<td>32</td>
</tr>
<tr>
<td>Registration</td>
<td>395</td>
</tr>
<tr>
<td>Registration Access</td>
<td>395</td>
</tr>
<tr>
<td>Religious Accommodations and Class Attendance</td>
<td>21</td>
</tr>
<tr>
<td>Readmitted Students</td>
<td>430</td>
</tr>
<tr>
<td>School of Accountancy</td>
<td>58</td>
</tr>
<tr>
<td>School of Art and Art History</td>
<td>78</td>
</tr>
<tr>
<td>Second Baccalaureate Degrees</td>
<td>32</td>
</tr>
<tr>
<td>Smoke-Free Policy</td>
<td>422</td>
</tr>
<tr>
<td>Social Justice Living and Learning Community</td>
<td>356</td>
</tr>
<tr>
<td>Socio-Legal Studies</td>
<td>357</td>
</tr>
<tr>
<td>Special Status</td>
<td>32</td>
</tr>
<tr>
<td>Student Complaint State Contacts</td>
<td>8</td>
</tr>
<tr>
<td>Student Conduct</td>
<td>421</td>
</tr>
<tr>
<td>Student Information and Records</td>
<td>423</td>
</tr>
<tr>
<td>Student Life</td>
<td>420</td>
</tr>
<tr>
<td>Students Called for Military Duty</td>
<td>430</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>415</td>
</tr>
<tr>
<td>Sustainability</td>
<td>365</td>
</tr>
<tr>
<td>Tourism Studies</td>
<td>371</td>
</tr>
<tr>
<td>Traditional Bachelor's Program</td>
<td>29</td>
</tr>
<tr>
<td>Traditional Bachelor's Program Academic Calendar</td>
<td>21</td>
</tr>
</tbody>
</table>