# **CURRICULUM AND INSTRUCTION (CUI)**

## CUI 4020 Introduction to Curriculum (3 Credits)

Introduces curriculum theory and curriculum as a field of study; includes study of issues such as standards, cognition, diversity, ecology, and social justice, among others.

## CUI 4021 Introduction to Curriculum Models and Application (4 Credits)

This course is designed as an introduction to curriculum theory and to curriculum as a field of professional study. Additionally, this course attempts to answer the question, what do models of education look like in actual practice? One way to understand the system of education in America is a profusion of the possible. There are almost as many models of curriculum as there are philosophies and theories of education. And at the same time there is a nearly universal commitment to form and structure in school, primarily driven by the standards movement, teacher accountability, and the normalizing influences of Western neo-liberal ideologies of individualism, commodification, and modernism. The primary purpose of this course is to investigate theories of education and curriculum and to see how these models are put into practice.

## CUI 4022 Curriculum Theory into Practice (4 Credits)

This course is designed to help students move from theoretical concepts and decisions involved in curriculum development to actual construction of curricula; survey of potential components encompassed in a variety of curricula followed by participation in designing a curriculum as a member of a student team; final project requires students to develop a curriculum. Prerequisites: CUI: 4021 or instructor's permission.

## CUI 4027 Implementing Curriiculum: A Practicum (3 Credits)

Opportunity to experience authentic role of curriculum on site; work at the Denver Zoo, the Denver Museum of Nature and Science, other museums and school sites; to develop and implement curriculum.

## CUI 4031 Teaching and Learning (3 Credits)

This course builds the biological and contextual foundations for learning, including brain and cognitive development theory. The course also helps students build a framework for culturally responsive classroom management, including rituals, routines, and relationships with students and families. Students apply cognitive development theory and equitable classroom management strategies to analytical case studies. Course restricted to students in TEP program or instructor approval.

#### CUI 4032 Analysis of Teaching (4 Credits)

By analysis is meant the human to human interaction (conceptual, beliefs, values and experiences) associated with researching, coaching, mentoring and peer-observation; all in the service of improving the quality and effectiveness of teaching. This course examines the questions of what makes for good teaching and how are those qualities measured for the purpose of assessment and coaching? Do standards and frameworks for good teaching, even well-designed and intentional rubrics flatten the act of teaching, limit teacher agency/authenticity, and therefore are inherently problematic? This course will provide several broad conceptual and practical lenses for answering these questions while realizing that no definitive answer or assessment protocol is fully adequate to the task.

## CUI 4033 The Practice of Teaching (3 Credits)

Course explores personal, conceptual, and empirical understandings of "teaching practice." Topics addressed have included: metaphors for teaching practice, best practices for equity and social justice, professional development practices.

## CUI 4034 Curriculum & Cultural Context (3 Credits)

This course will address the influence of cultural, political, sociological, and economic factors on curriculum at the instructional, situational, societal, and ideological levels. Students should be interested and willing to explore these issues through readings and discussion. We will be exploring various perspectives, including our own, which inform the discussion on this critical area of education.

## CUI 4035 Critical Perspectives in Education (4 Credits)

In this course, students will examine issues related to democracy, power, privilege, ethnicity, class, gender, and abilities in education as interactive systems that impact students, teachers, and school systems. Students will explore White privilege, racism, classism, sexism, ableism, and homophobia in education and the impact they have had and continue to have in public school settings. Theoretical frameworks such as Culturally Relevant Teaching and Critical Race Theory will be introduced in class. The course seeks to engage students in a discussion of strategies and techniques for the empowerment of historically marginalized and oppressed students.

## CUI 4039 Transformational Teaching and Learning (4 Credits)

The primary goal of this course is to provide a conceptual and practical framework for transformational teaching and learning grounded in the concepts of excellence, fairness, inclusion, and harmony. Transformational teaching is based on the idea that an instructor's purpose is greater than the delivery of information. Teaching is more than a transactional experience centering on content knowledge, mastery of content knowledge, and grades as a marker of academic success. Rather than being exclusively content-focused, transformational teachers help students become meta-critical participants in the learning process and well-practiced at critical thinking, goal setting and self-reflection. Transformation means both change in understandings of content knowledge and change in understanding of self as learner and engaged participant in the wider community.

## CUI 4041 School and Curricular Reform (3 Credits)

A look into school reform movements, why most fail and only a few succeed.

# CUI 4043 Development of Technology Enhanced Educational Environments (3 Credits)

Utilizing emerging Learning Theories and complex Instructional Design Theories, students will move into advanced educational web page development including designing with style sheets and layers. Several customized technology mediated lessons or professional projects will be created for use in practice. Various tools, designed to enhance learning environments, will be explored.

## CUI 4046 Technology Leadership (3 Credits)

Explores the role of ethics, values, social, legal, and power issues associated with technology in education. Analyzes how technology is transforming learning, equitable distribution of information, and the implications for providing optimal education to diverse learning populations.

## CUI 4047 Humanizing Pedagogies (3 Credits)

This course will provide a foundation in the conceptualization, design, and implementation of a humanizing pedagogy. A humanizing pedagogy is a "revolutionary approach to instruction that ceases to be an instrument by which teachers can manipulate students, but rather expresses the consciousness of students themselves" (Freire, 1970, p. 51). Students in this course will apply their knowledge of humanizing pedagogy to specific content areas, practice, and research through the tenets of a humanizing pedagogy. Moreover, students will explore humanizing literacy and math as fundamental human rights that afford access and equity to historically marginalized communities.

## CUI 4050 Research Seminar: Conducting Systematic Reviews (4 Credits)

The Curriculum and Instruction (C&I) Research Seminar (CUI 4050) on conducting systematic reviews is designed to facilitate the understanding of the practical, intellectual, and organizational demands of doctoral work. Specifically, the course is intended to initiate and socialize doctoral students into the world of research of education including scholarly norms, forms of research, rigor, conducting systematic reviews, and the norms and standards of academic writing. It will assist PhD students in thinking about the organizing a proposal and dissertation. In addition, students will learn about current research being conducted by seasoned researchers as well as by fellow C&I students. By understanding their work, students will deepen their knowledge of the research process and standards.

## CUI 4051 Seminar in Dissertation Organization and Design (1-5 Credits)

Individualized assistance in developing the dissertation topic, issue, problem; guidance in preparation for proposal orals and application to the Institution Review Board (IRB), direction for dissertation chapter organization, writing and completion. This seminar is targeted for the student who needs support in completing the dissertation.

## CUI 4058 Teacher as Researcher (4 Credits)

This class will introduce you to the emerging philosophical, ethical, and methodological issues that arise when school practitioners undertake research within their own sites. We will discuss different research traditions, develop and refine relevant research skills, and access resources to enable you to define and address challenges in your teaching. The final project for the course is an action research mini-study of a problem of practice in a specific educational context.

## CUI 4130 Philosophy of Education (3 Credits)

Focuses on 3-4 philosophers and examines the contributions their philosophical ideas have on education. Philosophers studied have included John Dewey, Cornel West, Nel Noddings and Maxine Greene.

## CUI 4131 Spirituality in Education (3 Credits)

This course will explore the role of spirituality in education from both the student and educator point of view through an examination of the big questions that are held close to the heart; the ones that guide us toward meaning making in the world. The primary goal of the course is to plumb the depths of spirituality, a deep sense of inner meaning making, that calls us toward a particular profession. The course will focus on the interface between spirituality in education through the lenses of curriculum and instruction.

## CUI 4153 Practicum: Curriculum and Instruction (0-5 Credits)

Designed to fit the educational needs of the individual student who may choose from a wide variety of practicum (internship) experiences, including teaching, curriculum development, museum internships or research projects in curriculum and instruction on or off campus. In the case of taking on a paid position, students should consult the Office of Internationalization about their visa status and requirements. Students should work with their advisor before they plan to register in order to get this course in the class schedule when it will be needed.

## CUI 4155 Special Topics (1-10 Credits)

Special topics in the field of education.

# CUI 4160 Race, Class and Gender in Education (3 Credits)

Ethnicity, Class & Gender in Education applies the concepts and theories of social science disciplines - sociology, social psychology, anthropology, historical perspectives and philosophical orientations - to the inclusive examination of the issues of racism, classism, sexism, and homophobia in education. This course seeks to conceptualize ethnicity, gender and social class as interactive systems, not as separate and independent variables, that impact students, teachers, school systems and the educational enterprise. We examine educational systems and practices that historically have disadvantaged women and peoples of color and discuss strategies and techniques for empowerment of the members of these groups.

## CUI 4170 Engaging Learners through the Arts (3-5 Credits)

This seven day institute is designed to engage participants in a challenging exploration of the creative process through workshops with professional artists in the disciplines of dance, visual arts, creative writing, music, and theatre, and to provide a greater understanding of the theory and practical applications of school reform.

## CUI 4172 Aesthetic Foundation in Education (3 Credits)

Educational enterprise from aesthetic viewpoints; examination of a number of aesthetic theories and exploration of implications for curriculum, teaching, and evaluation.

## CUI 4180 History and Philosophy of Education (4 Credits)

In this course, students will learn about the historical and philosophical trajectory of public education in relation to the larger sociopolitical forces of American history. Two premises guide this course: 1. Social and political conditions in society exert intense pressure education, which poses significant challenges to educators and education leaders. 2. Education is a political, economic, and social endeavor that reflects social arrangements. This course will provide an historical view of educational trends and reforms in America, answering the question why modern forms of education look and behave the way they do. Additionally, the course will provide a philosophical foundation of ontology, epistemology, and axiology through which to understand and critique the history of educational reforms and traditions.

## CUI 4310 Supporting Apprentice Teachers (3 Credits)

This course is designed to support mentor teachers as they build relationships with the apprentice teachers during the residency or student teaching phase of a teacher education program. It is designed to complement the professional standards-aligned coursework that apprentice teachers complete as part of the licensing process. As such, this course is designed to strengthen the connection between the institute of higher education and the field placement site. In doing so, mentor teachers can support the learning of apprentice teachers in the practical application of theoretical frameworks. This course specifically addresses supporting apprentice teachers as they learn as they learn to create culturally responsive classroom environments and to address the strengths and needs of all students particularly Culturally and Linguistically Diverse (CLD) Learners and students in Special Education. Topics addressed include mentor support for apprentice teachers' planning, teaching of reading and writing, applying a teacher evaluation framework, designing and interpreting formative and summative assessment, using data to inform instruction and differentiation for ELLs and GT identified students.

## CUI 4311 Supporting Apprentice Teachers II (3 Credits)

This course is designed to support mentor teachers as they build relationships with the apprentice teachers during the residency or student teaching phase of a teacher education program. It is designed to complement the professional standards-aligned coursework that apprentice teachers complete as part of the licensing process. As such, this course is designed to strengthen the connection between the institute of higher education and the field placement site. In doing so, mentor teachers can support the learning of apprentice teachers in the practical application of theoretical frameworks. This course specifically addresses supporting apprentice teachers as they learn about developing unit and lesson plans, literacy (specifically reading), and developing competencies in the evaluative framework for residency or student teaching used in a teacher education program.

## CUI 4312 Supporting Apprentice Teachers III (3 Credits)

This course is designed to support mentor teachers as they build relationships with the apprentice teachers during the residency or student teaching phase of a teacher education program. It is designed to complement the professional standards-aligned coursework that apprentice teachers complete as part of the licensing process. As such, this course is designed to strengthen the connection between the institute of higher education and the field placement site. In doing so, mentor teachers can support the learning of apprentice teachers in the practical application of theoretical frameworks. This course specifically addresses supporting apprentice teachers as they learn about developing formative assessment plans, literacy (specifically writing), and developing competencies in the evaluative framework for residency or student teaching used in a teacher education program.

## CUI 4313 Supporting Apprentice Teachers IV (3 Credits)

This course is designed to support mentor teachers as they build relationships with the apprentice teachers during the residency or student teaching phase of a teacher education program. It is designed to complement the professional standards-aligned coursework that apprentice teachers complete as part of the licensing process. As such, this course is designed to strengthen the connection between the institute of higher education and the field placement site. In doing so, mentor teachers can support the learning of apprentice teachers in the practical application of theoretical frameworks. This course specifically addresses supporting apprentice teachers as they learn about using data to inform instruction, differentiating instruction for English Language Learners and Gifted and Talented identified students, and developing competencies in the evaluative framework for residency or student teaching used in a teacher education program.

## CUI 4400 Nature and Needs of Gifted Learners (3 Credits)

This course is designed to provide participants with an understanding of 1) conceptual foundations and definitions of giftedness, 2) how intelligence, creativity, and non-intelligence factors are related to giftedness, 3) the nature, development, types, and needs of gifted individuals, 4) principles and issues in the identification of gifted individuals, and 5) the major issues and tensions in the education of gifted and talented individuals. Lectures, discussions, and other class activities and assigned readings and projects will include topics such as the history and nature of the giftedness construct; theories of intelligence and creativity and their relationship to conceptions of giftedness; types of giftedness; the diversity of gifted individuals and their personal and educational needs; the role of identification in the education and development of gifted children and youth; and purposes and perspectives in gifted education.

## CUI 4401 Nature, Needs, and Psychological Aspects of Giftedness (4 Credits)

This course delves into the study of giftedness, exploring the nature and needs of gifted individuals through an examination of current theories, models, research, and case-histories. By developing an understanding of psychological development, students will establish a strong foundation for applying effective practices that foster the psycho-social-emotional growth of gifted individuals. The course places a strong emphasis on synthesizing theoretical knowledge and applying it to specific situations.

# CUI 4402 Curriculum for Gifted Learners (3 Credits)

This course is designed to provide participants with an understanding of the conceptual foundations in the design and development of curriculum for gifted and talented students. Includes theories, models and processes for curriculum modification and curriculum design; strategies for adapting educational content, process, product, and learning environment based on the educational characteristics and needs of gifted learners; and curriculum design and development approaches that are effective in the intellectual and personal growth of gifted and talented learners. Content in this course is aligned with appropriate instructional strategies and techniques recommended for use with gifted and talented learners. Lectures, discussions, class activities, assigned reading and projects include topics such as a general overview of curricular principles and perspectives; critical analysis of general curriculum; issues of diversity in curriculum development and modification including cultural congruence; recommended models of curriculum development for gifted and talented learners; and national trends in gifted education.

## CUI 4403 Curriculum and Instructional Strategies and Fieldwork for Gifted Learners (4 Credits)

This course will provide participants with an understanding of conceptual foundations in the design and development of appropriate curriculum, as well as an understanding of how to apply a variety of instructional strategies and structures that address the specific academic and affective needs of gifted and talented learners. The course includes information as it applies to theories, models and processes for curriculum modification and design, strategies for adapting educational content, process, product, and learning environment based on the educational characteristics and needs of gifted learners, and curriculum design and developmental approaches that are effective in the intellectual and personal growth of gifted and talented learners. Instructional strategies that will be explored include: acceleration, enrichment, differentiation, compacting and telescoping, grouping structures, independent study, integrating depth, rigor, and complexity into assignments, advanced thinking skills, problem-based learning, and concept-based instruction. By identifying and applying specific instructional strategies can support identified goals and objectives stated in a student's Advanced Learning Plan (ALP) in both the cognitive and affective areas. Information within each module, assigned readings, online discussions, and demonstrations of learning will enable students to incorporate new learning and knowledge in order to develop and refine curriculum and implement instructional strategies to meet the needs of gifted learners.

## CUI 4404 Twice-Exceptional Students (3 Credits)

The purpose of this course is to acquaint the student with the various areas of exceptionalities typically encountered with gifted students and to provide classroom related techniques to assist the teacher in identifying and working with twice-exceptional children in an effective manner. Environmental, behavioral, motivational, emotional and educational needs are addressed. Legal responsibilities, parent communication and staff development will be emphasized.

#### CUI 4405 Practicum in Gifted Education (1-3 Credits)

Students wishing to earn credit for the Practicum in Gifted Education must complete an experience in three of the five areas (Teaching, Assessment, Administration, Research, or Policy). Students must submit a Practicum Proposal outlining the intended practicum experiences. This Proposal must be approved by the practicum faculty supervisor when the practicum experiences are begun.

# CUI 4407 Current Topics in Gifted Education: Identification and Twice-Exceptionality Applications (4 Credits)

This course is designed for practicing professionals, including teachers, counselors, psychologists, and administrators, who play a role in identifying and programming for gifted and twice-exceptional (2e) students. The course places a strong emphasis on employing multiple assessments, encompassing both quantitative and qualitative approaches, to effectively identify gifted and 2e students within an increasingly diverse population. This diversity includes students who are culturally and linguistically diverse, those who may qualify for early school entrance, and students facing economic disadvantages. Throughout the course, participants will gain a comprehensive understanding of the criteria for an inclusive identification process. They will explore the role of referral committees and Multi-Tiered Systems of Support (MTSS) processes in identifying and providing services for gifted and 2e students. Participants will also acquire skills to utilize data-driven approaches to tailor interventions to meet specific educational needs. The course will provide insights into the unique characteristics of twice-exceptional learners and effective strategies for addressing their educational and social-emotional needs. Topics will include prevalent 2e categories, 2e policies and partnerships, and considerations regarding misdiagnosis. The course will also cover topics such as legal requirements, communication, and professional development.

#### CUI 4408 Creativity: Theory & Practice (3 Credits)

The essence of innovation is creativity, in thought, process and outcome. Classic and current theories provide a foundation for analysis of the concept of creativity. This course is designed to provide participants with an understanding of 1) the conceptual foundations and definitions of creativity; 2) how intelligence, creativity, and non-intellective factors are related to the constructs of giftedness; 3) documented brain research underlying exceptional cognition and/or creativity; 4) principles and issues in the identification and appropriate programming for creative individuals; and 5) the multiple perspectives and manifestations of creativity. Salon discussion groups, lectures, class activities and assigned readings and projects focu on the history and nature of the construct of creativity, theories of creativity, the role of innovation and transformation, assessment and measurement tools, environmental support of the creative process and creativity, and teaching and learning applications.

#### CUI 4410 Program Development, Leadership, and Communication in Gifted Education (4 Credits)

This course emphasizes the concepts and practices involved in development and management of school- and district-based programs for the special education of gifted and talented children and youth. The course leads to in-depth understanding of program components and systems, program planning and evaluation, program leadership, advocacy in gifted education, and communications. This is an advance graduate course in the sequence of courses offered by the University of Denver's Morgridge College of Education, Doctorate of Education in Curriculum and Instruction with specialization in Gifted Education. Strong knowledge of strategies in curriculum and instruction is important. Students will be expected to participate in discussions, activities, written work, and presentations to demonstrate and utilize knowledge and skills. Upon completion of this course, students should be able to meet the Colorado Department of Education's endorsement standards in gifted education listed at the end of this syllabus.

## CUI 4411 Wkshp: Gifted & Talented Educ (1-3 Credits)

This blended course is designed to provide participants with an overview of the education of gifted and talented students. Areas of focus within the course include definitions of gifted and talented learners, gifted learner characteristics, educational/academic and affective/psychosocial needs, common identification methods, and research-based instructional strategies for gifted learners. Course restricted to students in TEP program or instructor approval.

## CUI 4412 Culturally and Linguistically Diverse Learners in Gifted Education (4 Credits)

Culturally and Linguistically Diverse Learners have inequitable access to gifted programming, curricula and services; therefore, they do not receive instruction that nurtures their learning talents, culture, and emergent bilingualism. This course is designed to address the needs of the Culturally and Linguistically Diverse (CLD) and the Gifted and Talented (GT) learner. Upon completion of this course, students should be able to meet the approved standards for the English Language Learner Professional Development Pathway. In addition to ELL standards, this course is aligned with state gifted education standards.

## CUI 4450 Education and Psychology of Exceptional Children (3 Credits)

Characteristics of students with moderate needs and state criteria used to determine eligibility for special education population.

## CUI 4451 Teaching the Exceptional Child (3 Credits)

This course provides a broad overview of the field of exceptionality and special education. Included are discussions of current issues and controversies in the field, characteristics, classification, diagnosis, and educational interventions for early childhood and school-aged children with high-incidence and low-incidence disabilities who have exceptional education needs. This course also explores the characteristics of students with various disabilities, the history of Special Education, The Individuals with Disabilities Education Act (IDEA) and its current implications, the Response to Intervention Model (Rtl) and the Individualized Education Plan (IEP). Prerequisite: CUI 4450.

# CUI 4452 Low Incidence Disabilities and Behavior Intervention (3 Credits)

This course reviews a wide range of neurodevelopmental disorders and low-incidence disabilities including fragile X syndrome and Fetal Alcohol Syndrome, along with syndromes associated with chromosomal deletions. Implications for assessment and intervention are outlined including diagnostic criteria, prevalence and treatment. Research on identification and treatment including state of the art interventions and assistive technology are addressed. This class also addresses theories, research, effective practices, and background information needed to implement successful behavior intervention programs for whole classroom management and for students identified with behavioral needs. Preerquisites: TEP 4010 and CUI 4451.

## CUI 4453 Curriculum Adaptations and Assessments for Children with Disabilities (3 Credits)

This course applies theories, research, effective practices, and background information for assessment for students with disabilities, monitoring student academic progress, and transition planning for students exiting K-12 schools.

## CUI 4455 Assessment of Students with Special Needs (3 Credits)

Theories, research, effective practices and background information needed to develop, implement, analyze, and apply assessment data for mild/moderate-needs students.

## CUI 4457 Behavior Intervention (3 Credits)

Theories, research, effective practices, and background information needed to implement successful behavior intervention programs for mild/ moderate-needs students.

## CUI 4459 Curriculum, Collaboration, and Transitions in K-12 Schools (3 Credits)

Knowledge, techniques to develop independent skills for K-12 moderate/mild-needs students and transitions across grade levels.

## CUI 4500 Elementary Literacy: Theory and Practice I (1-3 Credits)

This course provides an introduction and overview to the many components that make up a quality balanced literacy program. During the course students will analyze current research and theory in reading and writing instruction. This course will use students' classroom placements to create a foundational understanding on which to build solid literacy philosophy as well as instructional ideas and strategies.

## CUI 4501 Elementary Literacy: Theroy and Practice II (1-3 Credits)

This course is an extension of Elementary Literacy I and concentrates on the continued development of theories and practical strategies for teaching literacy in diverse classrooms. This course will supply K-6 teachers with the skills to assess student abilities, select appropriate instructional strategies, and design effective instructional programs that lead to increased listening, speaking, reading and writing achievement of all children.

## CUI 4502 Elementary Science and Social Studies Methods for Culturally and Linguistically Diverse Learners (3-4 Credits)

This course will enable students to develop a deeper understanding of science and social studies content and curriculum in the elementary classroom. Students will explore a range of instructional materials and develop teaching strategies with the guidance of state content standards and research on effective classroom instruction for culturally and linguistically diverse students. This course will revolve around discussion of key questions in the following eight areas: The Role of Social Studies and Science; Instruction; Standards; Content Knowledge; Curriculum Integration; Technology; Culturally Responsive Pedagogy; Sheltered Instruction. Course restricted to students in TEP program or instructor approval.

# CUI 4503 Elementary Math Methods for Culturally and Linguistically Diverse Learners (3,4 Credits)

This course prepares students for mathematics instruction in elementary classrooms. We will study theories of learning, the development of children's mathematical thinking, and research-based instructional practices in mathematics. Students will solve mathematical problems using a variety of methods, practice giving math lessons, engage in continuous instructional improvement activities, grapple with issues of equity—race, class, gender, ability, and the intersections therein—as they pertain to math teaching and explore digital resources related to teaching math for understanding. Course restricted to students in TEP program or instructor approval.

## CUI 4504 Elementary Math, Science, and Social Studies Methods Cultural Linguistic Diversity I (3 Credits)

This course is the first of a two-course study that will prepare students to develop a deeper understanding of math, science and social studies content and curriculum in the elementary classroom as guided by Colorado Model Content Standards and research on effective sheltered content instruction for culturally and linguistically diverse students. Pre-service teachers will develop an understanding of how students in the elementary grades construct meaning through active engagement in purposeful learning opportunities.

## CUI 4505 Mathematics across the Content Areas (2-4 Credits)

In this class, prospective secondary teachers study fundamental mathematical ideas and how they apply to various real-world settings. For instance, students may explore the mathematics of gerrymandering and map projections. Students will also engage in mathematical practices such as argumentation and justification. Finally, students will learn about inquiry-based approaches to teaching that they can use in their secondary classrooms with their students.

## CUI 4506 Mathematics for Elementary School Teachers I (2,3 Credits)

In this class, prospective elementary school teachers experience an in-depth look at the representations of rational numbers, including base-ten and decimal numbers, integers, fractions, and arithmetic operations on these sets. Problem solving is emphasized throughout. Students also learn about inquiry-based approaches to teaching that they can use in their classrooms with their students.

## CUI 4507 Mathematics for Elementary School Teachers II (3 Credits)

In this class, prospective elementary school teachers study fundamental mathematical ideas typically taught in grades 5-8. Students learn about visualization and its importance in geometry. Students study geometric shapes and solve a variety of problems involving geometric shapes. In addition, students learn some fundamental ideas of measurement and study length, area, volume, dimension, error and precision. Students also solve problems involving area, learn about solid shapes, and solve volume and surface area problems. Finally, students learn about inquiry-based approaches to teaching that they can use in their classrooms with their students. Prerequisite: CUI 4506.

## CUI 4508 Mathematics for Elementary School Teachers III (3 Credits)

In this class, prospective elementary school teachers study fundamental mathematical ideas typically taught in grades 5-8. Students learn about visualization and its importance in geometry. Students study geometric shapes and solve a variety of problems involving geometric shapes. In addition, students learn some fundamental ideas of measurement and study length, area, volume, dimension, error and precision. Students also solve problems involving area, learn about solid shapes, and solve volume and surface area problems. Finally, students learn about inquiry-based approaches to teaching that they can use in their classrooms with their students. Prerequisites: CUI 4506.

## CUI 4509 Mathematics for Middle School Teachers (3 Credits)

Mathematics education for middle school teachers. Meets Common Core State Standards.

## CUI 4511 Secondary Literacy: Reading and Writing Across Content Areas I (3 Credits)

This course is the first of a two-course study that is designed to give secondary Residents an introduction to best practices in content area literacy instruction for in 6-12 classrooms. In support of the instructional shifts presented by the Common Core State Standards, Residents will explore the rationale behind instructional strategies for literacy instruction in the content area classrooms, as well as examine tools and techniques for teaching students to become strategic readers and writers as they model their own thinking and scaffold students' use of strategies for content area literacy.

# CUI 4512 High School Mathematics from an Advanced Perspective (3 Credits)

High School mathematics education. Meets Common Core State Standards.

## CUI 4513 Elementary Math, Science, and Social Studies Methods Cultural Linguistic Diversity II (3 Credits)

This course is an extension of the Autumn quarter session and will prepare students to develop a deeper understanding of math, science and social studies content and curriculum in the elementary classroom as guided by Colorado Model Content Standards, Next Generation Science Standards and research on effective sheltered content instruction for culturally and linguistically diverse students. Pre-service teachers will develop an understanding of how students in the elementary grades construct meaning through active engagement in purposeful learning opportunities.

## CUI 4514 Secondary Literacy: Reading and Writing Across Content Areas II (3 Credits)

This course is an extension of the Autumn quarter session. In this course, Residents will deepen their knowledge of the English language and linguistics, through an analysis of socio and psycholinguistics, as well as rigorous practice in grammar, syntax and semantics. As Residents gain a more practical understanding of the complexities of the English language, they will be better able to support their English Language Learners. This course addresses the following Common Core State Standards: L1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking L3: Apply knowledge of language to understand how language functions in different context to make effective choices for meaning or style, and to comprehend more fully when reading or listening. W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

# CUI 4521 Urban Education II: School, Student, Family and Community Influences on Student Learning (2-4 Credits)

This course will consider how teachers are able to foster meaningful connections between the educational goals of the schools and the personal and cultural experiences of young people. Students will study the child in relation to family, school, and community, as well as the relationships between teacher and pupil. We will emphasize the cultural complexity of an urban society and pay special attention to ways that curriculum, language, and literacy affect school success.

# CUI 4527 Supporting English Language Learners and Students with Special Needs Across Content Areas (3 Credits)

This course evaluates similarities and differences in theory, methods, approaches, and techniques in meeting the needs of diverse learners including English Language Learners, special needs, and/or gifted. Differentiated instruction, Sheltered instruction, and Response to Intervention (RTI) are key methodologies in meeting needs of diverse learners.

## CUI 4529 Foundations of Education for Culturally and Linguistically Diverse Learners in Teaching and Learning (3,4 Credits)

This course will examine the essential knowledge and orientations educators must possess to effectively meet the needs of culturally and linguistically diverse (CLD) learners through the analysis of historical, political, ethical, and legal foundations of language education in the United States. This course will explore the immigrant experience and the experience of CLD learners in schools in order to understand how the psychosocial aspects of the immigrant experience can impact second language learning. Course restricted to students in TEP program or instructor approval.

#### CUI 4530 Second Language Acquisition (1-3 Credits)

## CUI 4531 Literacy, Language, and Cultural Development for Multilingual Learners (3,4 Credits)

This course provides foundational and applied knowledge about language acquisition, linguistics, and literacy development for culturally and linguistically diverse learners in classroom contexts. Our focus will be on analyzing theories in relation to language or classroom discourse including speech intentions, functions, and organizational patterns, while also considering elements of sociolinguistics, specifically cultural references, registers, dialects, accents, and nonverbal communication. In addition to language development, we will look at literacy development for multilingual learners and the ways language and literacy development and culture impact multilingual learners.

### CUI 4532 Culturally Responsive Pedagogy (3,4 Credits)

This course examines the intricate web of variables that interact in the effort to create culturally responsive pedagogy. It examines the need and establishes a definition for culturally responsive pedagogy; and includes an examination of one's conception of self and "others;" conception of social relations; and conception of knowledge teaching and learning in a culturally diverse context. Furthermore, it cultivates the practice of culturally responsive teaching as well as explores the reality of implementing cultural responsive pedagogy in an era of standardization. In sum, this course helps practicing teachers acquire the dispositions, cultural knowledge, and competencies to adapt their curriculum and instructional skills for culturally responsive classroom practice.

# CUI 4536 Literacy, Language, and Culture in Assessment Practices for Multilingual Learners (4 Credits)

The primary goal of this course is to help educators gain the necessary skills, orientations, and competencies to become critical users of both summative and formative assessment instruments in relation to multilingual learners and create classroom assessments that account for the language and literacy needs of multilingual learners. First, this course addresses testing practices and the implications for culturally and linguistically diverse learners in our national and local contexts. Second, this course assists educators in critically analyzing the cultural and language implications of assessments as fair, valid, reliable, authentic, and effective for emerging bilinguals. Third, this course emphasizes both summative and formative assessments and their role in guiding evidence-based practices. In this course students will have first-hand opportunities to develop, select, review, adapt, and administer assessments to make informed teaching decisions based on the cultural, academic, and social emotional needs of multilingual learners.

## CUI 4538 Literacy, Language, and Culturally Relevant Strategies for Multilingual Learners (4 Credits)

In this course you will build from the contextual and theoretical background to understand the social, cultural, linguistic, and academic factors that influence the acquisition of language and literacy for culturally and linguistically diverse (CLD) or multilingual learners. Specifically, you will identify and adapt important culturally relevant language and literacy strategies within your content area that include oracy, phonics, phonemic awareness, and fluency, comprehension, vocabulary, argumentative writing, or cause and effect in reading and writing... all with a central focus on the needs of multilingual learners. You will become an expert in your content area and strategy and then teach your classmates key information and model a lesson.

# CUI 4540 Curriculum, Instruction and Assessment for Culturally and Linguistically Diverse Learners I (1-4 Credits)

This course explores the theoretical underpinning and practical application of curriculum design. Students design their own curriculum unit aligned to standards, essential questions, big understandings, and social justice themes. Course restricted to students in TEP program or instructor approval.

# CUI 4541 Curriculum, Instruction, and Assessment for Culturally and Linguistically Diverse Learners II (1-4 Credits)

In this course, apprentice teachers will explore the theoretical underpinnings and practical application of data and assessment. This course will build essential knowledge and skills in school and classroom assessments, research methodology, and equity in assessment practices. Students will design a series of assessments aligned to unit goals. Course restricted to students in TEP program or instructor approval.

## CUI 4542 Curriculum, Instruction, and Assessment: Theory and Practice III (1-4 Credits)

This is the third and final quarter of an academic year-long weekly seminar to foster reflective, research-based classroom practice. Teacher candidates will deepen their understanding of teaching and learning in contemporary schools through a guided teaching apprenticeship with a trained mentor teacher, focused observations of a myriad of classrooms, readings, interviews, discussions, critical writing, and presentations. Course restricted to students in TEP program or instructor approval.

## CUI 4544 Ed Psych: Exceptional Child (1-3 Credits)

The focus of this course is on educating children and adolescents with special needs in the general education classroom. The intent is to enable future educators to better serve the needs of these children in their classrooms. Topics such as the special education process, information on specific disabilities, accommodations and modifications, behavior issues, mental health, and communicating with parents will be addressed.

## CUI 4600 History and Philosophy of STEM Education (3 Credits)

The goal of this course is to help future Science, Technology, Engineering, and Mathematics (STEM) education leaders understand the historical trajectory of public education in relation to the larger sociopolitical forces of American history. Two premises guide this course: 1. Social and political conditions in society exert intense pressure on STEM fields and STEM education, which poses significant challenges to STEM education leaders. 2. Education in general – and STEM education in particular – are political, economic, and social endeavors that reflect social arrangements. This course will enable students to view their specialization as part of a complex and larger milieu; that is the U.S. educational system.

## CUI 4610 Learning & Teaching of STEM (4 Credits)

In this course, students will be introduced to foundational research literature on learning and teaching in STEM education. The research introduced will focus extensively on theories of learning and how these theories are influencing P-16 STEM curriculum, instruction and assessment. The literature base introduced is foundational to research conducted in STEM education.

#### CUI 4620 Research on Diversity, Equity, and Social Justice in STEM Education (4 Credits)

The goal of this course is to help future STEM education leaders understand the current context of issues of diversity, equity and social justice in STEM education and explore its implications for access and opportunity for traditionally marginalized students. Two premises guide this course: 1. Social and political conditions in contemporary society exert intense pressure on STEM fields and STEM education. 2. Education in general – and STEM education in particular – are political, economic, and social endeavors that reflect social arrangements. This course will enable students to view their specialization as part of a complex and larger milieu; that is the U.S. educational system.

#### CUI 4630 Technology in STEM Education (4 Credits)

The goal of this course is to help students understand the role of technology in teaching and learning, particularly in Science, Technology, Engineering, and Mathematics (STEM) courses. Three premises guide this course: 1) Technology offers great potential for innovation in education, but it also can be dangerous if used inappropriately and indiscriminately; 2) Social and political conditions in society exert intense pressures on technology in STEM education, which poses significant challenges to STEM education leaders; and, 3) Education in general – and STEM education in particular – are political, economic, and social endeavors that reflect social arrangements. This course will enable students to view their specialization as part of a complex and larger milieu; that is the U.S. educational system.

## CUI 4640 Improving STEM Instruction (4 Credits)

For as long as the United States has implemented public education—well over 100 years—many features of schooling have stayed the same. Despite waves of curricular and policy reforms, widespread anxiety over student achievement (especially in comparison to other countries), and concerted efforts to "disrupt" education, many elements of teaching and learning persist. In STEM education, especially, scholars and practitioners have been advocating for the same things for decades: teaching for conceptual understanding, using rich tasks that encourage student collaboration, incorporating discourse in the classroom, and supporting students to engage in STEM practices like proof, argumentation, and the scientific method. We know that these things can support meaningful student learning. But most K-12 STEM classrooms are centered on memorization and standardized testing. Why is it so hard to change? The short answer. It's complicated. In this course, students will critically examine various instructional improvement efforts, identifying both the ways in which these efforts are potentially productive and potentially destructive. We'll juxtapose these efforts with relevant research on teacher learning and organizational change in order to critique reform efforts. Ultimately, students will become more critical consumers of instructional improvement efforts and will be better prepared to translate research into practice. Although STEM is the focus of this class, the overarching ideas of the course are applicable to many other subjects.

#### CUI 4690 Field Experience: Curriculum & Instruction (3 Credits)

This course provides students with an authentic field experience for those pursuing a degree in Curriculum & Instruction. Field Experience in Curriculum & Instruction is an off-campus, experience taken throughout the coursework plan. Field Experience is designed to broaden one's professional skills and is considered a critical transition of substantial growth. Field Experience is a hybrid on-line and face-to-face seminar that is designed to facilitate case analysis, ongoing self-reflection, and to provide peer consultation and professional feedback relevant to best practices. The Field Experience is considered a critical professional transition to help consolidate learning and professional competencies in preparation for employment. All students engage in weekly experience seminars (either on-line or face-to-face) facilitated by a University Supervisor. Supervision is designed to provide ongoing professional feedback, case analysis, peer consultation, and continued professional development and experiences pertinent to successful practice. This course promotes the idea that educators are lifelong learners and regularly reflect on and adjust their practice.

#### CUI 4700 Cognitive, Creative, and Learning Theories and Applications (4 Credits)

Cognitive, Creative, and Learning Theories and Applications is an introduction to and survey of various creativity and cognitive theorists and their work. Students will explore and compare theories, examining key elements, contexts, and settings. Theoretical applications will be explored in both practice and research, with a focus on integrating and synthesizing concepts and evaluating their applicability. By the end of the course, students will have a comprehensive understanding of numerous approaches, critical analysis skills, cognitive theories, and the ability to apply these concepts in various contexts.

#### CUI 4710 Foundations of Education: Cognitive Theory II (3 Credits)

Second course in cognitive research in education. Includes theories and research regarding the implementation of these theories in specific curricula. Prerequisite: CUI 4700.

# CUI 4720 Discourse in the Mathematics Classroom (3 Credits)

The study of discourse as it relates to mathematics teaching and student learning.

## CUI 4730 STEM and Instructional Technology (3 Credits)

The goal of this course is to help students understand the role of technology in teaching and learning, particularly in Science, Technology, Engineering, and Mathematics (STEM) courses. Three premises guide this course: 1) Technology offers great potential for innovation in education, but it also can be dangerous if used inappropriately and indiscriminately; 2) Social and political conditions in society exert intense pressures on technology in STEM education, which poses significant challenges to STEM education leaders; and, 3) Education in general – and STEM education in particular – are political, economic, and social endeavors that reflect social arrangements. This course will enable students to view their specialization as part of a complex and larger milieu; that is the U.S. educational system.

## CUI 4740 School and Curricular Reform (4 Credits)

In this course, students will be introduced to and explore a range of educational policies and how those policies have influenced and continue to influence teaching and learning. A particular focus of the class will be the underlying ideologies of policies that have had a strong influence on the development of curriculum and research in education. Students will learn how to critique and analyze educational policies and their implementation.

## CUI 4991 MA Independent Study (1-10 Credits)

#### CUI 4995 Independent Research (1-10 Credits)

## CUI 5980 Research as Problem Analysis (4 Credits)

Curriculum and Instruction (C&I) is designed to facilitate the understanding of the practical, intellectual, and organizational demands of doctoral work. Specifically, the course is intended to initiate and socialize doctoral students into the world of research of education including scholarly norms, forms of research, rigor, and the norms and standards of academic writing. It will assist doctoral students in thinking about the organizing a proposal and dissertation. In addition, students will learn about current research being conducted by seasoned researchers as well as by fellow C&I students. By understanding their work, students will deepen their knowledge of the research process and standards. Students are advised to complete this course no later than the fall of their second year in the doctoral program. The course objectives include: (a) understand the rigorous scholarly research norms and standards for doctoral students in educational research, and b) Identify and describe the key components of the C&I comprehensive exam and dissertation proposal.

#### CUI 5981 Research as Intervention (3 Credits)

This course is the second of three culminating research courses for students in the Ed.D. in Curriculum and Instruction and is designed to help candidates finish collecting their data and analyze their data. This course will also introduce and develop the evaluation or analysis section of the doctoral paper and the beginning steps of the dissemination of the research project.

#### CUI 5982 Applied Research (4 Credits)

This is a seminar type course with each student working on his or her own research project. While time will be devoted to data collection during this course, students should be collecting and analyzing data prior, during, and following this course. These tools will help with the development of emerging understandings related to answering the research questions and support the writing of chapter 4, "Findings" or "Results" of the dissertation in practice. This course will build on previous research courses and will develop research skills related to the process of data collection and data analysis. This course will provide the opportunity to further develop the skills and knowledge associated with applied research. By the end of the course students will be able to present a draft version of the first 4 chapters of the dissertation.

#### CUI 5983 Defense of Research (2 Credits)

This course will build on the "persistent problems of practice" and research questions identified in CUI: 5980, data collection and analysis in CUI 5981, and applied research skills in CUI 5982. By the end of the course you will be able to schedule and present your doctoral research project for defense. Completion of CUI: 5982 "Research as Applied Research" or permission of the instructor.

## CUI 5991 PhD Independent Study (1-10 Credits)

#### CUI 5992 Research as Intervention and Applied Analysis (4 Credits)

This is a seminar type course with each student working on his or her own research project. While time will be devoted to data collection during this course, students should be collecting and analyzing data prior, during, and following this course. These tools will help with the development of emerging understandings related to answering the research questions and support the writing of chapter 4, "Findings" or "Results" of the dissertation in practice. This course will build on previous research courses and will develop research skills related to the process of data collection and data analysis. This course will provide the opportunity to further develop the skills and knowledge associated with applied research. By the end of the course students will be able to present a draft version of the first 4 chapters of the dissertation.

#### CUI 5993 Dissertation in Practice (1-4 Credits)

Doctoral research credits for doctoral research project toward the EdD. Prerequisite: Must be an EdD student in C&I; must have completed C&I doctoral research courses (CUI 5980, CUI 5981, and CUI 5982).

## CUI 5995 Dissertation Research (2 Credits)

This course provides students the opportunity to present and defend the conceptual foundations of research, the applied research and subsequent impact on the field. The course builds on the dissertation introduction, research questions, methodology, data collection, data analysis and discussion of implications as identified in previous courses. Time is devoted in this course to considering rational and defense of research data analysis, reporting, discussion of implications and dissemination. This is a seminar type course with each student writing on their own area of research within their own project. In-depth analysis of applied research will occur through reading, discussions and critiques. Students will hone their own research analysis and the process of communicating study results. The concept and application of completed studies and community communications will be thoroughly examined as students complete and defend their own final work. Students will be finishing the Institutional Review Board process and collecting and analyzing data prior to enrolling in this course. Students are expected to have successfully completed all research methods courses prior to enrollment in this series. Students will be expected to complete extensive readings, participate in discussions, activities and written work, and prepare and deliver presentations and documents to demonstrate knowledge and skills.