

BIOPHYSICS (BIOP)

BIOP 4100 Foundations in Biophysics (3 Credits)

Focus of the course is on application of basic physics principles to the study of cells and macromolecules. Topics include diffusion, random processes, thermodynamics, reaction equilibria and kinetics, computer modeling. Must be admitted to the MCB PhD program or related graduate program with instructor approval. Cross listed with PHYS 4100.

BIOP 4150 Cellular Biophysics (3 Credits)

Biophysical approaches to understanding cell function. We emphasize the various experimental approaches that biophysicists use to study basic cellular processes, including a variety of fluorescence images, optical and electrophysiological techniques. Cross listed with BIOL 4211.

BIOP 4210 Current Topics in Biophysics (2 Credits)

This is a seminar course that focuses on current primary literature in the fields of molecular and cellular biophysics. This is the first of a three course, year-long sequence.

BIOP 4993 Lab Rotation (2-9 Credits)

Lab rotation in Molecular and Cellular Biophysics before students pass the first phase of their qualifying exam.

BIOP 4995 Independent Research (1-9 Credits)

Independent research in Molecular and Cellular Biophysics before students pass the first phase of their qualifying exam.

BIOP 5991 Independent Study (1-10 Credits)**BIOP 5995 Independent Research (2-9 Credits)****BIOP 6991 Independent Study (1-10 Credits)****BIOP 6995 Independent Research (1-10 Credits)**