Courses

**BIOP 401**  Introduction to Biophysics  credit: 3 Hours.  
Review of membrane and cell biophysics designed to introduce the theoretical and mathematical bases of bioelectricity, photobiology and biomolecular motors. 3 undergraduate hours. 3 graduate hours. Credit is not given for BIOP 401 and PHYS 475. Prerequisite: One year each of college-level mathematics and physics; one year each of college level biology and chemistry recommended.

**BIOP 419**  Brain, Behavior & Info Process  credit: 3 Hours.  
Same as MCB 419 and NEUR 419. See MCB 419.

**BIOP 432**  Photosynthesis  credit: 3 Hours.  
Same as CPSC 489 and IB 421. See IB 421.

**BIOP 550**  Biomolecular Physics  credit: 4 Hours.  
Same as MCB 550 and PHYS 550. See PHYS 550.

**BIOP 576**  Computational Chemical Biology  credit: 4 Hours.  
Same as MCB 550 and CSE 576. See CHEM 576.

**BIOP 581**  Lab Rotation I  credit: 2 Hours.  
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. First five weeks of fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 582 and BIOP 583.

**BIOP 582**  Lab Rotation II  credit: 2 Hours.  
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. Second five weeks of fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 581 and BIOP 583.

**BIOP 583**  Lab Rotation III  credit: 2 Hours.  
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. Meets last five weeks of the fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 581 and BIOP 582.

**BIOP 586**  Special Topics in Biophysics  credit: 1 to 4 Hours.  
Advanced course/tutorials on topics of interest in biophysics, such as electrophysiology, radiation biology, bioenergetics, protein structure, or the physics of muscular contraction. May be repeated. Prerequisite: Consent of instructor.

**BIOP 590**  Individual Topics  credit: 2 to 10 Hours.  
For graduate students wishing to study individual problems or topics not assigned in other courses. May be repeated. Prerequisite: Consent of department.

**BIOP 595**  Biophysics Seminars  credit: 1 to 2 Hours.  
Survey of literature in one area of biophysics, with special emphasis on student reports. 1 to 2 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. Prerequisite: Graduate standing in Biophysics and Quantitative Biology.

**BIOP 599**  Thesis Research  credit: 0 to 16 Hours.  
Research may be conducted in any area under investigation in a faculty laboratory, subject to the approval of the faculty member concerned and the department in which the research is to be done. Approved for S/U grading only. May be repeated.