Molecular Physiology & Biophysics (MPBP)

Courses

MPBP 6010. Human Physiology & Pharm I. 4 Credits.
An integrated examination of the physiology and pharmacology of the peripheral nervous, muscle and cardiovascular systems in the human body. Pre/co-requisites: CHEM 1450, CHEM 1580 or equivalent; two semesters general physics; two semesters calculus. May not be taken for credit with MPBP 6060.

MPBP 6030. Critical Reading. 1 Credit.
Critical reading of the current literature, team taught by the faculty in the Department of Molecular Physiology & Biophysics, giving broad exposure to the expertise present in the department.

MPBP 6100. Molecular Control of the Cell. 3 Credits.
Examines the fundamental molecular mechanisms that control dynamic cellular processes. Advanced topics in cell biology will be explored from the single molecule to the whole tissue level with an emphasis on the coordination of complex molecular systems. Prerequisites: MPBP 6010, BIOC 6001, BIOC 6002; Instructor permission.

MPBP 6300. Biomedical Grantsmanship. 2 Credits.
Introduces Graduate students in the biomedical life sciences to the process of writing competitive research proposals for funding from federal and private agencies such as the National Institutes of Health (NIH).

MPBP 6391. Master’s Thesis Research. 1-18 Credits.
Research for the Master’s Thesis.

MPBP 6810. Seminar. 1 Credit.
Presentation and discussion by advanced students, staff, and invited speakers, of current topics in physiology. Prerequisite: Department permission.

MPBP 6900. Medical Master’s Capstone. 1-2 Credits.
Advances fundamental knowledge in Biochemistry, Pharmacology, and Physiology by addressing therapeutic applications. Students will choose and research current clinical problems and will communicate new molecular strategies through formal presentations. Prerequisites: BIOC 6001, MPBP 6010; Medical Science Graduate student; or Instructor permission.

MPBP 6990. Special Topics. 1-18 Credits.
Topics of interest to Graduate students beyond the scope of existing courses.

MPBP 6993. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MPBP 7491. Doctoral Dissertation Research. 1-18 Credits.
Research for the Doctoral Dissertation.