

PHARMACOLOGY (PHRM)

Courses

PHRM 200. Medical Cannabis. 3 Credits.

An introduction to the pharmacology underlying recreational and medicinal uses of Cannabis. Focuses on Cannabis taxonomy, chemistry of cannabinoids, physiological effects, and emerging therapeutic applications. Discusses historical, political and socio-economic influences on medical marijuana legislation. Prerequisite: BCOR 103, NSCI 110, NSCI 111 or PHRM 201, or Instructor permission.

PHRM 201. Introduction to Pharmacology. 3 Credits.

This course will focus on biochemical and physiological actions of prototype drugs used in the treatment and prevention of human diseases. Prerequisite: Introductory courses in Biology and Organic Chemistry.

PHRM 240. Molecules & Medicine. 3 Credits.

This course conveys an understanding about drug design and the molecular mechanisms by which drugs act in the body. It highlights the importance of medicinal chemistry as it overlaps with the disciplines of chemistry, biochemistry, microbiology, cell biology, and pharmacology. Prerequisites: Intro to Organic Chemistry, Intro to Biology; Permission.

PHRM 272. Toxicology. 3 Credits.

This course is intended to provide an understanding of the chemical, biochemical and physiological factors that determine the pathological effects of chemicals in living systems. Prerequisites: Organic chemistry, background in Biology, or Instructor permission.

PHRM 290. Topics Molecular&Cell Pharm. 3 Credits.

Focuses on basic principles, drug interactions with receptors, membranes, synapses, neurotransmitters, macromoles, cytoskeleton, ion channels and pumps, and mechanisms of drug resistance. Prerequisite: Introductory course in organic chemistry, background in physiology or health sciences.

PHRM 301. Medical Pharmacology. 6 Credits.

All topics for a conventional course in pharmacology for medical students or health science students. General pharmacokinetic and pharmacodynamic principles, treatment rationales and adverse effects.

PHRM 302. Pharmacological Techniques. 1-4 Credits.

Experiments conducted under supervision in the areas of drug metabolism, modes of drug action, physicochemical properties of drugs, bioassay, and toxicology. Thesis masters students limited to three credits.

PHRM 305. Milestones in Pharmacology. 2 Credits.

A critical readings class where students read and present landmark pharmacology papers and link them to modern experiments and clinical applications. Co-requisites: PHRM 201 or Graduate standing.

PHRM 308. Integrative Physiol. & Pharm.. 3 Credits.

Intended for students pursuing careers in basic scientific research or health-related fields, designed to combine general physiological principles with examples of disease-based pathophysiology and targeted pharmacological approaches. Case studies will emphasize the impact of these processes on human function. Pre/Co-requisites: Two semesters of chemistry, two semesters of physics, and a background in biology/physiology or health sciences.

PHRM 372. Special Topics. 1-3 Credits.

Topics of current interest and importance in pharmacology are considered in depth through presentations by staff, students, and visiting scientists. Prerequisite: Instructor Permission. Credit variable.

PHRM 373. Readings in Pharmacology. 2 Credits.

Intensive directed reading in one area of pharmacology. Pharmacology students must choose a topic outside thesis research area. Term paper and seminar on selected topic required. Prerequisite: Instructor Permission.

PHRM 381. Seminar. 1 Credit.

Current developments in pharmacology are presented for discussion by students. Prerequisite: Instructor Permission.

PHRM 390. Medical Master's Capstone. 2 Credits.

Students advance their fundamental knowledge in biochemistry, pharmacology, and physiology by addressing therapeutic applications in a discussion format. Students will choose and research current clinical problems and will communicate new molecular strategies through formal presentations. Prerequisites: Graduate Student standing in Medical Science program; BIOC 301, MPBP 301, or Instructor permission.

PHRM 391. Master's Thesis Research. 1-12 Credits.

PHRM 396. Advanced Special Topics. 1-18 Credits.

See schedule of courses for specific titles.

PHRM 491. Doctoral Dissertation Research. 1-12 Credits.

PHRM 496. Advanced Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.