

INTERDISCIPLINARY AND OTHER

Interdisciplinary and courses from the health science schools may be available for College of Arts and Sciences students to take.

CAS 101. Dean's Fellows Foundational Sequence. 0 credits.

Deans Fellows course. Graded Satisfactory/Unsatisfactory. P. Deans Fellow; IC.

IDC 491. Women in Science. 1 credit. SP

Course designed to provide an historical overview of women in science while focusing on current practices. Discussion will emphasize barriers that women have faced in the past and strategies for coping, presently, in what is no longer a "man's field." Class meets once a week.

BMS 303. Physiology. 4 credits. SP

Provides Nursing and other Health Profession students with a basic knowledge of human physiology. Presents an overview of the function of the major organ systems using lectures and demonstrations. 4R. P. NUR major or IC.

BMS 311. Basic Human Anatomy. 4 credits. FA

Course designed to provide pre-professional students with an introduction to human gross anatomy, histology, and neuroanatomy. A systemic approach is used. Dissected cadaver specimens and anatomical models are available as learning aids. P. IC.

BMS 497. Directed Independent Research. 1-3 credits. OD

This course consists of original scientific investigation under supervision and guidance of the instructor. Upon successful completion of this course, students will acquire the skills necessary to perform experiments, assess, and interpret results; demonstrate competence in the laboratory, effectively analyze, synthesize, and interpret data; and communicate their results. P. IC.

IDC 401. Service Learning in Local Communities - Sports and Education. 3 credits.

This course combines service learning in a local community and in a foreign country in order to compare experiences of the relationship between sports, education, and development across different cultures. P. Sr. stdng.

MIC 141. Microbiology. 4 credits. FA

Introductory course, consisting of lectures, study groups, and computerized self-instruction, designed to provide nursing students with a basic knowledge of medical microbiology and immunology. P. None.

MIC 541. Medical Microbiology and Immunology. 3 credits. FA

Introductory course focusing on foundations of general bacteriology and virology, antibacterial therapy and mechanisms of antibacterial resistance, infectious diseases caused by bacteria, viruses, fungi, and parasites, and the host defenses against these microorganisms. R, L. P. Second year Pharm.D. student or degree seeking graduate student. Upper level undergraduate or other students require approval from course director.

MIC 543. Essentials of Immunology. 3 credits. SP

Lecture course covering the major areas of contemporary immunology including host resistance to infection, the chemistry of antigens and physiology of the immune system, immunogenetics and transplantation immunology, immunological techniques, tumor immunology, and immunopathology. P. MIC 541, or IC.

OTD 215. Medical Terminology. 1 credit. (Same as PMC 215)

Medical Terminology is a critical part of language and communication used by health care practitioners. This self-directed course is designed for students planning a career in the health services and related fields. Course content includes a study of basic medical terminology. Students will construct and decipher terms using prefixes, suffixes, word roots, combining forms, special endings, plural forms, and abbreviations related to body systems, cavities, planes, and positions. Competency is evaluated throughout the semester through online testing.

PHA 213. Human Anatomy for Pre-Pharmacy Students. 3 credits.

Pre-pharmacy students will learn cellular, tissue, organ and system level anatomical structures, with emphasis on using anatomical knowledge as a foundation for pharmacist-provided patient care. P. BIO 202 and BIO 201 or equivalent.

PHR 241. Pharmacology I. 0-4.5 credits.

This course can be offered on campus or web-based. A comprehensive coverage of the major drug groups and their mechanisms. The emphasis is on human pharmacology and the rational basis for therapeutics. Specific drug classes will be discussed with emphasis on mechanism of action, organ systems affected by the drugs, their pharmacokinetics, therapeutic indications, untoward effects, contraindications and drug-drug interactions. P. PHA 301; PHA 404; MIC 541; CO: PHA 337.

PHR 242. Pharmacology II. 0-4.5 credits.

The pharmacy pharmacology course provides a comprehensive coverage of the major drug groups and their mechanisms. The emphasis is on the pharmacological basis for the therapeutic use of drugs. Specific drug classes will be discussed with emphasis on mechanism of action, organ systems affected by drugs, adverse effects, contraindications, pharmacokinetics, therapeutic indications and drug-drug interactions. P. PHR 241.

PHR 350. Introduction to Neuropharmacology. 3 credits.

This course is designed as an introductory course in pharmacology and neuropharmacology for students who have majored in or who have professional interests in biology, chemistry, biochemistry, psychology, pre-health professions and pre-medicine. Pharmacology is more than the study of the therapeutic uses of drugs. It is a science which uses the basic concepts of biology and chemistry to determine how drugs affect the organism. Neuropharmacology applies the basic principles of pharmacology to the nervous system and the tissues and organs that the nervous system regulates. Pharmacology gives a unique perspective in understanding how cells, organ systems, and organisms function. Pharmacology uses a systematic approach to investigate drug mechanisms causing a biological event for therapeutic use—from the molecular level to the whole animal. These pharmacological approaches also allow us to study how biological systems fail to function, providing information on the etiology of disease. Pharmacology research is essential for the development, testing and clinical use of drugs to treat disease. P. BIO 201, 202, CHM 203, 321, Jr. stdg. or IC.

PHR 531. Topics in Pharmacology and Drug Discovery Journal Club. 1 credit. FA

The most ground-breaking studies (classic through recent) in the field of pharmacology are discussed in a round-table format. Students will learn the basics of the scientific method, study design, experimental technique theory and general chemical principles, physiochemical properties and drug-receptor interactions used to derive structure-activity relationships for important drug classes and predict biological properties.

PHR 532. Hot Topics in Neuroscience Journal Club. 1 credit. SP

Continuation of PHR 531. P. DC.

PHR 537. Fundamentals of Neuroscience. 3 credits. FA, OD

This course will provide a detailed exploration of cellular, molecular and systems neuroscience and provide foundational knowledge necessary to becoming a neuroscientist. The class format will include didactic lectures with open discussions and self-directed computer simulated learning activities.

PHR 595. Directed Independent Study. 0-5 credits. FA, OD, SP, SU

Supervised independent projects that may include laboratory work, assigned readings, research papers, etc. Available in autonomic pharmacology, cardiovascular pharmacology, exocrine pharmacology, and neuropharmacology. P. Undergraduate or Gr. stdg. and DC.

PHR 597. Directed Independent Research. 1-4 credits. FA, OD, SP, SU

Supervised independent research for motivated students to become involved in ongoing original research projects of the pharmacology faculty. P. Undergraduate or Gr. stdg. and DC.