

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.

NSC 111. Time's Arrow: The Evolving Universe. 2 credits.

This course is a broad exposure for non-science students to several scientific disciplines and ways of knowing under the umbrella of a common theme: change. Course topics to be covered include the scientific method, the nature and measurement of time, The Big Bang/ evolution of the Universe, and biological evolution.

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.

Courses

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

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

CAS 140. Current Topics: A Liberal Arts Perspective. 1 credit.

This 1-credit course will introduce students to a College of Arts and Sciences, Liberal Arts perspective on a current topic. Students will explore the topic from a variety of disciplinary perspectives featuring lectures and discussions with several different faculty members. Students will also be introduced to Blueline - the University's learning management system. Course will be facilitated by the Dean's office and will include a variety of faculty across several disciplines. P. Incoming freshmen only.

CAS 201. Sophomore Advising Program. 0 credits.

As a continuation of student's process of discernment and discover, this year long course will build on the foundation provided by RSP and provide the student with opportunities for further exploration of Creighton's Catholic, Jesuit identity and of Ignatian spirituality, and to reflect upon its relevance to the students' individual path. It will also provide activities to support continued academic and co-curricular planning and professional development to prepare for a meaningful transition to the major and pre-professional work. P. RSP 101 or 102.

CAS 202. Sophomore Advising Program. 0 credits.

As a continuation of students' process of discernment and discovery, this year long course will build on the foundation provided by RSP and provide the student with opportunities for further exploration of Creighton's Catholic, Jesuit identity and of Ignatian spirituality, and the reflect upon its relevance to the students' individual path. It will also provide activities to support continued academic and co-curricular planning and professional development to prepare for a meaningful transition to the major and pre-professional work. P. RSP 101 or RSP 102.

CAS 590. Applied Research Practicum. 3 credits.

Research course that applies Creighton undergraduate training to a problem identified by a local business partner. The course will address "real world problems" while refining problem-solving, critical thinking and communications skills. Students completing the course will better understand how their undergraduate major is applicable in an applied setting. P. Senior status.

IDC 000. Study Abroad. 0-12 credits.**IDC 320. Jesuit Worldwide Learning: Global Perspectives in Liberal Arts. 1 credit.**

This course is designed to introduce students to the mission of Jesuit Worldwide Learning (JWL) and to its students living at the margins. Texts and videos concerning Ignatian pedagogy and mission; marginalization and privilege; daily lives of refugees; and techniques for online teaching will be analyzed and discussed.

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.

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.

IDC 561. Exploring Holistic Health-Implications for Care and Policy. 3 credits.

This course explores different understandings of health and how these influence perceptions of care and ultimately policies pertaining to public health and health care. Students compare and contrast their understandings and perceptions with those of diverse groups encountered during a study abroad program.

IDC 590. Collaboration and Diversity: A Journey Through the Balkans. 3 credits.

This blended FLPA course introduces students to the context of the Balkans and involves visits to religious and historical sites. Through the course, students gain a sense of the world, their place within it, and understanding of the values of Men and Women for and With Others and Cura Personalis.

NSC 111. Time's Arrow: The Evolving Universe. 2 credits.

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NSC 227. Science/Fiction. 4 credits.

This course is an exploration of the genre of science fiction as well as selected scientific topics contained therein. Science fiction will be examined from both a literary and a scientific perspective. P. Critical issues in Human Inquiry course, Contemporary composition course, and Mathematical Reasoning course.

OTD 102. Exploring Occupational Therapy as a Career. 3 credits.

This course is designed for individuals who are considering a career in occupational therapy. The course addresses a broad overview of the professional of occupational therapy and provides experiences to discern if occupational therapy is one's calling. P. One semester of college experience.

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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.

PHA 310. Human Anatomy for Pre-Professionals. 3 credits.

This is a survey course for pre-health professions where students will learn cellular, tissue, organ and system level anatomy, with an emphasis on the application of this knowledge as it relates to the health professions. Structure/function relationships, clinical cases, and anatomical terminology will be emphasized. P. BIO 201 or BIO 202 (both preferred).

PHA 311. Human Anatomy Lab for Pre-Professionals. 1 credit.

This is a lab course that accompanies Human Anatomy for Pre-Professionals, PHA 310, that utilizes web-based histology labs, visits to the gross anatomy lab, demonstrations and models to teach human anatomy as it pertains to healthcare professions. P. BIO 201 or BIO 202 (both preferred); CO: PHA 310.

PHA 340. Native American Culture and Health. 2 credits. (Pharmacy Elective Course)

This course allows students to learn firsthand about the culture and health care practices of Native Americans by participating in seminars offered by Native tribal and spiritual leaders, healers, and others who work with Native populations in promoting wellness and pride in culture. Students will participate in the course with other SPAHP students enrolling in the elective course PHA 341. P. IC.

PHA 404. Human Physiology. 3 credits.

This course is designed to provide pharmacy students with a basic knowledge of human physiology. The function of the major organ systems is covered in a series of lectures and discussions. This course is required for PH1 students both on campus and online.

PHR 241. Pharmacology I. 0-4.5 credits.

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