

899. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

910. Biology of Disease
Fall. 3(2-3) Approval of department. Primarily for students in the biological sciences.

Basic morphologic changes in disease with emphasis on the related physiologic pathology. Laboratory includes relevant problems in post-mortem diagnosis.

980. Histopathologic Diagnosis
Fall, Winter, Spring, Summer. 3(0-9)
May re-enroll for a maximum of 6 credits. 803, 820.

Trimming, histopathologic examination, description, diagnosis and reporting of specimens from biopsy and necropsy.

990. Advanced Correlative Pathology
Fall, Winter, Spring, Summer. 5(0-15)
May re-enroll for a maximum of 15 credits. Approval of department.
Experience in morphologic and clinical pathology and correlation of these with the clinical aspects of disease.

999. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

PHARMACOLOGY PHM

College of Human Medicine College of Osteopathic Medicine College of Veterinary Medicine

350. Introductory Human Pharmacology
Spring. 3(3-0) PSL 332 or concurrently; or approval of department.

Survey of pharmacology including general principles, central nervous system drugs, autonomic nervous system drugs, cardiovascular and renal drugs, endocrine drugs, anti-infectives, poisoning therapy, and other basic related topics.

430. Drug Abuse
Fall. 3(3-0) Juniors and approval of department. Biology and Chemistry recommended.

Actions, mechanism of action, toxicity and uses of drugs of abuse. Sociological and psychological aspects of drug abuse and the legal aspects of the sale and distribution of drugs are considered.

480. Special Problems
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 5 credits. Approval of department.

520. Principles of Pharmacology
Fall, Spring. 4(4-0) PSL 502.

Pharmacology principles, including absorption, distribution, biotransformation, drug antagonism, receptor theory and pharmacogenetics; literature data analysis; adverse drug reactions. Chemotherapy including anti-neoplastic, antiviral and anti-microbial agents; endocrine and emergency therapies.

521. Pharmacodynamics
Winter, Summer. 5(4-0) 520.

Pharmacology of the nervous systems (central, peripheral and autonomic); cardiovascular, renal, gastrointestinal drugs.

522. Toxicology
Spring. 3(3-0) 521.
Toxicology of economic and household poisons, noxious gases and vapors, minerals solvents, pesticides and pollutants.

610. Clinical Pharmacology
Spring. 4(4-0) 521.
Therapeutic efficacy, toxicity and optimal clinical usage of important drugs used in the treatment of disease.

810. Synaptic Transmission
Winter of odd-numbered years. 4(4-0)
Approval of department.
Chemical and electrical aspects of the transmission of nervous impulses at synaptic and neuroeffector junctions and the influences of drugs upon these processes.

811. Organ System Pharmacology
Winter of even-numbered years. 4(3-3)
510 and approval of department.
Current concepts and recent advances in the areas of cardiovascular, renal and syncytial smooth muscle pharmacology.

812. Advanced Principles of Pharmacology and Toxicology
Spring of odd-numbered years. 4(4-0)
522 and approval of department.
Kinetics of drug absorption, elimination and metabolism; drug-receptor interaction. Principles of drug toxicity in evaluation and treatment; includes problems of modern toxicology, i.e., teratogenesis, mutagenesis, carcinogenesis.

870. Problems
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 5 credits. Approval of the department.
Limited amounts of individual work on selected research problems.

899. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

910. Seminar
Fall, Winter, Spring. 1(1-0) May re-enroll for a maximum of 3 credits.

911. Literature Critique
Fall. 1(1-0) Approval of department.
Seminar and discussion of current pharmacological literature.

980. Problems
(880.) Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 5 credits. Approval of department.
Limited amounts of individual work on selected research problems.

999. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

101. Introduction to Philosophy: Ethics and Value
Fall, Winter, Spring, Summer. 3(3-0)
Moral responsibility, praise and blame, good and evil, justice, law and morality, individual liberty and collective authority and contemporary moral issues are typical problems.

102. Introduction to Philosophy: Epistemology and Metaphysics
Fall, Winter, Spring, Summer. 3(3-0)
Skepticism and certainty, existence, matter and mind, God, space and time, knowledge and belief, perception, personal identity, causality, and free-will are typical problems.

103. Introduction to Philosophy: Logic
Fall, Winter, Spring, Summer. 3(3-0)
Deductive and inductive reasoning and such topics as rational argumentation, fallacies, definition, meaning, truth and evidence.

200H. Honors Work
Fall, Winter, Spring. 1 to 16 credits. Approval of department.

211. Introduction to the History of Philosophy, Part I
Fall, Winter, Spring. 3(3-0)
Greek and Roman philosophy.

212. Introduction to the History of Philosophy, Part II
Fall, Winter, Spring. 3(3-0)
Middle Ages and Renaissance.

213. Introduction to the History of Philosophy, Part III
Fall, Winter, Spring. 3(3-0)
Eighteenth century (Berkeley and Hume) to twentieth century.

294. Special Topics
Fall, Winter, Spring, Summer. 2 to 6 credits. Approval of department.
Intensive study of some particular problem or author in philosophy.

311. Indian Philosophy
Fall, Winter. 3(3-0)
Metaphysical, ethical and social theories developed within major Indian philosophical systems; e.g., philosophical Buddhism, Vedantist transcendentalism, Samkya dualism, and the Realist schools.

312. Chinese Philosophy
Spring. 3(3-0)
Major cosmological and ethical doctrines of such Chinese authors and movements as Confucius, Mo Tzu, Lao Tzu, Taoism, Yin-Yang dualism, Buddhism, responses to Western influences, the new China.

315. American Philosophy
Spring, Summer. 3(3-0) Three credits in philosophy or approval of department.
Examination of such thinkers as Royce, Pierce, James, Dewey, Whitehead and Santayana, illustrating classic American contributions to philosophy.

323. Existentialism
Fall, Winter, Spring. 3(3-0) Three credits in philosophy or approval of department.
An examination of a major existentialist author (or authors), so designed as to place existentialist views in significant relation to the tradition of European thought.

PHILOSOPHY PHL

College of Arts and Letters

Each of the courses 101, 102, 103 is an independent gateway to an area of philosophy. Together they provide a comprehensive introduction to philosophical inquiry through contact with philosophical issues.