Pharmacology Courses (PCOL)

This is a list of all pharmacology courses. For more information, see Pharmacology.

**PCOL:2120 Drugs: Their Nature, Action, and Use**  
Principles of drug action, toxicity, sedatives, stimulants, hallucinogens, narcotics, over-the-counter agents, antibiotics, and oral contraceptives. Offered spring semesters. Requirements: closed to students enrolled in the Pharm.D. program.

**PCOL:4130 Drug Mechanisms and Actions**  
Introduction to principles of pharmacology, pharmacologic actions of drugs. Offered spring semesters. Requirements: undergraduate biochemistry and physiology courses.

**PCOL:4199 Undergraduate Research in Pharmacology**  
Experimental research under faculty supervision in department laboratories. Offered fall and spring semesters.

**PCOL:5135 Principles of Pharmacology**  
Basic pharmacological principles underlying drug absorption, drug distribution throughout the body, drug metabolism, and drug elimination; how these processes determine drug dosing and the means by which dosing parameters are characterized; drug receptor interactions and their quantitation. Offered spring semesters.

**PCOL:5136 Pharmacogenetics and Pharmacogenomics**  
Impact of genetic variation on the actions and metabolism of drugs; database search techniques to identify variants. Offered spring semesters. Prerequisites: PCOL:5135. Recommendations: undergraduate or graduate biochemistry and/or genetics.

**PCOL:5137 Neurotransmitters**  
Mechanisms of neurotransmission focusing on mechanisms of synthesis, regulation of release, mechanisms of action, means of degradation, and CNS pathways for major neurotransmitters; disease states involving various neurotransmitter systems. Offered spring semesters.

**PCOL:5204 Basic Biostatistics and Experimental Design**  
Overview of theory of experimental design and data analysis in biological sciences; types of analyses available for common types of data generated in biomedical sciences; review of statistical methods used in published studies; cursory coverage of mathematical computations involved in various analytical tests. Offered fall semesters.

**PCOL:6015 Topics in Neuropharmacology**  
Recent advances in neuropharmacology, developmental neurobiology, neuroendocrinology, and related neurosciences. Offered fall semesters.

**PCOL:6020 Topics in Pharmacogenomics**  
Recent advances in pharmacogenomics, pharmacogenetics, and related genetic fields. Offered fall semesters.

**PCOL:6025 Topics in Cell Signaling and Cancer**  
Recent advances in cell signaling mechanisms, mechanisms of cancer, cancer biology, and related sciences. Offered spring semesters.

**PCOL:6030 Topics in Cardiovascular Pharmacology**  
Recent advances in cardiovascular pharmacology, metabolic pharmacology, and related sciences. Offered spring semesters.

**PCOL:6080 Pharmacology Seminar**  
1 s.h.

**PCOL:6090 Graduate Research in Pharmacology**  
arr.

**PCOL:6099 Special Topics in Pharmacology**  
arr.

**PCOL:6203 Pharmacology for Graduate Students**  
Principles of pharmacology, pharmacologic actions of drugs, correlation with therapeutic uses. Offered fall semesters. Prerequisites: BIOC:5243 and MPB:5153.

**PCOL:6204 Pharmacology for Health Sciences: Nurse Anesthetist**  
Principles of pharmacology; pharmacologic actions of drugs, correlation with therapeutic uses. Offered fall semesters. Prerequisites: ACB:6000 or NURS:6000. Requirements: enrollment in Anesthesia Nursing Program.

**PCOL:6207 Ion Channel Pharmacology**  
1 s.h.

**PCOL:6208 G Proteins and G Protein-Coupled Receptors**  
Structure and function of small molecular weight and G proteins; heteromeric G proteins and G protein-coupled receptors. Offered spring semesters of even years. Prerequisites: BIOC:5243. Recommendations: MMED:6225.

**PCOL:6209 Steroid Receptor Signaling**  
1 s.h.

**PCOL:6210 Pharmacology for Health Sciences: Nurse Practitioner**  
Structure-function relationship and genomic and nongenomic actions of the steroid hormone receptor family; basis for actions of novel new ligands on these receptors. Offered spring semesters of even years. Same as MPB:6209, NSCI:6209.

**PCOL:6250 Advanced Problem Solving in Pharmacological Sciences**  
1 s.h.

**PCOL:6255 Advanced Problem Solving in Pharmacological Sciences II**  
1 s.h.

**PCOL:6256 Advanced Problem Solving in Pharmacological Sciences III**  
1 s.h.

**PCOL:6257 Advanced Problem Solving in Pharmacological Sciences IV**  
1 s.h.

**PCOL:6258 Advanced Problem Solving in Pharmacological Sciences V**  
1 s.h.

**PCOL:6259 Advanced Problem Solving in Pharmacological Sciences VI**  
1 s.h.

**PCOL:6260 Pharmacology for Pharmacy Students I**  
Principles of pharmacology, drug and toxic mechanisms; systemic and organ-specific pharmacologic and toxic responses. Offered fall semesters. Requirements: second-year Pharm.D. enrollment or graduate standing.

**PCOL:6261 Pharmacology for Pharmacy Students II**  
Continuation of PCOL:6260. Offered spring semesters. Prerequisites: PCOL:6260. Requirements: second-year Pharm.D. enrollment or graduate standing.

**PCOL:6262 Pharmacology for Pharmacy Students III**  
Continuation of PCOL:6261. Offered fall semesters. Prerequisites: PCOL:6260 and PCOL:6261. Requirements: third-year Pharm.D. enrollment or graduate standing.
PCOL:8240 Basic Pharmacology for Dental Students

Principles of pharmacology, pharmacologic actions of drugs, correlation with therapeutic uses. Offered spring semesters. Prerequisites: BIOLC:8101 and MPB:8115. Requirements: D.D.S. enrollment.