Courses

PCOL 430. Principles of Toxicology. 2 hours.
Examine the toxic effects of drugs and chemicals on organ systems.
Lectures emphasize basic principles, effects on specific organ systems,
major classes of toxic chemicals, and specialized topics such as forensic
and industrial toxicology. Course Information: Same as BPS 430. Credit
is not given for PCOL 430 if the student has credit for EOHS 457.

PCOL 510. Molecular Pharmacology of Platelets, Thrombosis and
Vascular System. 2 hours.
Molecular mechanism and therapeutic approaches to: platelet functions,
thrombosis, hemostasis, and vascular biology. The platelet as a model
cell for molecular mechanisms of intracellular signal transduction and
Cell adhesion. Course Information: Prerequisite(s): Credit or concurrent
registration in GCLS 501 and GCLS 503; or consent of the instructor.

PCOL 530. Pharmacology and Biology of the Vessel Wall. 2 hours.
Regulation of physiological and pathological processes in the
Cardiovascular system; e.g. endothelial barrier, cell adhesion, smooth
muscle proliferation, angiogenesis, endothelial gene expression.
Pharmacological treatment of cardiovascular diseases. Course
Information: Prerequisite(s): Credit or concurrent registration in GCLS
501 and GCLS 503; and consent of the instructor.

PCOL 540. Ion Channels: Structure, Function, Pharmacology and
Pathology. 2 hours.
The concept of ion channels is treated from the perspectives of their
molecular structures and functions. Modulation, pathological conditions
(channelopathies), and pharmacological intervention will also be treated.
Course Information: Samas PHYB 540. Recommended background:
One undergraduate course in Biochemistry and one in Physiology, or
consent of the instructor.

PCOL 550. The Biology and Pharmacology of the Lung. 2 hours.
Covers topics in lung biology and physiology. The importance of impaired
lung function in inducing lung diseases and potential therapeutics will
be discussed. Course Information: Prerequisite(s): Credit or concurrent
registration in GCLS 501; and Credit or concurrent registration in GCLS
503; or consent of the instructor.

PCOL 560. Graduate Pharmacology. 3 hours.
General principles of molecular mechanisms of drug action in selected
areas of pharmacology such as factors altering pharmacokinetics and
pharmacodynamics. Mechanisms of cardiovascular and pulmonary
disease and cancer will be focused. Course Information: Recommended
background: GCLS 501 and GCLS 502 and GCLS 503. Class Schedule
Information: To be properly registered, students must enroll in one
Lecture-Discussion and one Discussion.

PCOL 594. Special Topics. 1 hour.
Organized presentation and discussion of rapidly developing research
areas in molecular, cellular and systems pharmacology. Course
Information: May be repeated. Prerequisite(s): Consent of the instructor.

PCOL 595. Pharmacology Seminar. 1 hour.
Presentation of research and/or current literature by invited lecturers and
students. Course Information: Satisfactory/Unsatisfactory grading only.
May be repeated.

PCOL 598. M.S. Thesis Research. 0-16 hours.
Thesis work under the supervision of a graduate advisor. Course
Information: Satisfactory/Unsatisfactory grading only.

PCOL 599. Ph.D. Thesis Research. 0-16 hours.
Thesis work under the supervision of a graduate advisor. Course
Information: Satisfactory/Unsatisfactory grading only.