PHARMACOLOGY (PHMCOL-M)

PHMCOL-M/PHM SCI 521 — PHARMACOLOGY I
3 credits.
Pharmacological actions of important drugs, including drugs that affect the peripheral nervous system, the central nervous system, and the gastrointestinal tract. Enroll Info: None
Requisites: Junior standing and Pharmacology and Toxicology undergraduate program or declared in the Doctor of Pharmacy program with second year standing
Repeatable for Credit: No
Last Taught: Fall 2017

PHMCOL-M/PHM SCI 522 — PHARMACOLOGY II
3-4 credits.
Pharmacological actions of important drugs, including hematopoietic, thrombolytic, antihyperlipidemic, immunopharmacologic, anticancer, anti-inflammatory, diuretic, antihypertensive, antianginal, and anti-arrhythmic agents, and agents used to treat congestive heart failure. Enroll Info: None
Requisites: PHMCOL-M/PHM SCI/PHMCOL-M 521
Repeatable for Credit: No
Last Taught: Spring 2018

PHMCOL-M/ANATOMY/B M E/MED PHYS/PHYSICS/RADIOL 619 — MICROSCOPY OF LIFE
3 credits.
Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging. Enroll Info: None
Requisites: PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265
Course Designation: Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

PHMCOL-M/M&ENVTOX/MEDICINE/PATH/PHM SCI/POP HLTH 625 — TOXICOLOGY I
3 credits.
Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented. Enroll Info: None
Requisites: M&ENVTOX/MEDICINE/ONCOLOGY/PATH/PHMCOL-M/PHM SCI/POP HLTH/M&ENVTOX/MEDICINE/ONCOLOGY/PATH/PHM SCI/ PHMCOL-M 625
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

PHMCOL-M/M&ENVTOX/MEDICINE/PATH/PHM SCI/POP HLTH 626 — TOXICOLOGY II
3 credits.
Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented. Enroll Info: None
Requisites: M&ENVTOX/MEDICINE/ONCOLOGY/PATH/PHMCOL-M/PHM SCI/POP HLTH/M&ENVTOX/MEDICINE/ONCOLOGY/PATH/PHM SCI/ PHMCOL-M 625
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018

PHMCOL-M/BIOCHEM/ZOOLOGY 630 — CELLULAR SIGNAL TRANSDUCTION MECHANISMS
3 credits.
Lecture-discussion. Comprehensive coverage of human hormones, growth factors and other mediators; emphasis on hormone action and biosynthesis, cell biology of hormone-producing cells. Enroll Info: Intro biochem (BIOCHEM 501 or 507 & 508) & cell biology (Biocore 303 or Zool 570 or Path/750) or cons inst
Requisites: None
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

PHMCOL-M 699 — INDEPENDENT STUDY
1-3 credits.
Enroll Info: None
Requisites: Consent of instructor
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions

PHMCOL-M 781 — MOLECULAR AND CELLULAR PRINCIPLES IN PHARMACOLOGY
4 credits.
Provides an in-depth introduction to the molecular and cellular principles of pharmacology. Emphasis is on the mechanisms of drug and small molecule action in cells, with a particular focus on downstream signaling pathways, second messenger systems, protein kinase cascades, and the regulation of gene transcription. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2018
PHMCOL-M 875 — SPECIAL TOPICS IN PHARMACOLOGY
1-3 credits.

Special topics in pharmacology. Topics may vary. Enroll Info: Intro crse in biochem, mol biol, and genetics and cons inst

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

PHMCOL-M 901 — SEMINAR AND JOURNAL CLUB
1-2 credits.

Students and staff present research reports of current interest. Enroll Info: None

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

PHMCOL-M 990 — RESEARCH
1-12 credits.

Research facilities of the department available to qualified students.

Enroll Info: None

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions