

List of Third and Fourth Year Pharmacy Courses

Third Year Fall Semester

- BCMB 3100

Prereq: BIOL 1107, CHEM 2211

The structure and function of biological molecules, enzymology, metabolism and bioenergetics, and molecular biology.

- PMCY 3000– Dr. Cory Momany

Prereq: BIOL 1107

Human physiology with an emphasis on cell membranes/transporters and organ systems as targets and modifiers of drug action.

- PMCY 3500– Dr. Michael Bartlett

Prereq: CHEM 2212

Major techniques applicable for the characterization and determination of pharmaceutical agents.

Third Year Spring Semester

- PMCY 3200– Dr. Deborah Elder

Prereq: MATH 2250

Presentation of the basic concepts of physical pharmacy and the pharmaceutical sciences with an emphasis on drug delivery systems.

- PMCY 3300L – Dr. Gurvinder Singh Rekhi

Prereq: PMCY 3000, PMCY 3500, CHEM 2212

Laboratory of major techniques used to support pharmacology and drug development in the pharmaceutical sciences.

- PMCY 3800– Dr. Phillip Greenspan

Prereq: PMCY 3000, BCMB 3100

Basic pharmacological principles and specific therapeutic actions of major drug classes commonly used in clinically significant disease states.

- PMCY 4300– Drs. Scott Pegan and George Zheng

Prereq: CHEM 2212, BCMB 3100

Integration of the basic principles of organic chemistry, biology, and biochemistry in order to understand how synthetic and naturally-occurring biologically active compounds function in living organisms.

Fourth Year Fall Semester

- PMCY 4500/4500L – Dr. Gurvinder Singh Rekhi

Prereq: ALL PMCY 3xxx COURSES

Overview and underlying principles of drug development in the United States. Primary focus on understanding and assessing various phases in drug development, including preclinical and clinical investigations, manufacturing, and other general considerations of the drug development process.

- PMCY 4200– Dr. Arthur Roberts

Prereq: PMCY 3200, PHYS 1211

Biopharmaceutical and pharmacokinetic principles with an emphasis on evaluation of dosage formulations and drug development.

- PMCY 4960– Faculty

Fourth Semester Spring Semester

- PMCY 4510/4510L– Gurvinder Singh Rekhi

Prereq: PMCY 4500

Assessment of the major issues and stages in drug development, including regulatory, economic, and legal issues associated with the drug development process.

- BCMB 3600

Prereq: BCMB 3100

A focus on the remarkable impact that genome sequencing projects is having on virtually all aspects of biochemistry, as well as on medicine and biotechnology. An introduction to a broad range of 'omic' topics, including functional genomics, microarrays, proteomics, physiological genomics, and bioinformatics.

- PMCY 4970– Faculty