

PHARMACOENGINEERING AND MOLECULAR PHARMACEUTICS (DPMP)

DPMP 738. Nanomedicine. 3 Credits.

Offers an introduction to the interdisciplinary field of nanomedicine for students with physical, chemical, or biological sciences background. It will emphasize emerging nanotechnologies and biomedical application.

Grading status: Letter grade.

DPMP 815. Drug Metabolism. 1.5 Credit.

Permission of the instructor. Introduction to the use of concepts, chemistry, enzymology, and techniques in drug metabolism for the design and development of safe and effective therapeutic agents.

Grading status: Letter grade.

DPMP 862. Advanced Physical Pharmacy. 1.5 Credit.

Discuss industrial approaches to pharmaceutical formulation development.

Grading status: Letter grade.

DPMP 863. Advanced Pharmaceutics II. 1.5 Credit.

Students will develop a strong understanding of the role of basic properties of the solutions and other compositions in preparation and development of pharmaceutical formulations and be able to apply the principles of experimental design and formulation in drug development. Students will further develop and extend their ability to integrate theory and practice to solve complex problems within multi-disciplinary contexts. DPMP 862 or pre-approval by course director is required. Strong physical/organic chemistry background is required.

Grading status: Letter grade.

DPMP 864. Advances in Drug Delivery. 3 Credits.

Students will learn the basic concept of biological barriers for drug delivery, various formulation strategies to overcome barriers, and concepts relevant to specific routes of delivery.

Requisites: Prerequisites, PHCY 410 and 411; permission of the instructor for students lacking the prerequisites.

Grading status: Letter grade.

DPMP 869. Grant Writing: NSF Fellowship. 1 Credit.

Students will learn about scientific and grant writing as it pertains to writing an NSF fellowship.

Grading status: Letter grade.