

## Phar 650: Formulation Development Pharmaceutics & Drug Delivery

This course involves practical and theoretical principles involved in the development of pharmaceutical formulations including immediate and modified release oral dosage forms, sterile drug products, transdermal formulations, nasal sprays, ocular formulations, inhalation delivery, and semisolid formulations. Emphasis is placed on developing formulations based on the physical and chemical properties of the drug substance and intended use of the drug product. Development of formulations using experimental design, including Quality-by-Design principles, are covered. Guest lecturers with expertise in preformulation and formulation development will provide students with the opportunity to discuss problems relevant to the industry. The course will require students to critically review and present publications in small groups and complete assign assignments.

3 Credits

## Instruction Type(s)

• Lecture: Lecture for Phar 650

## **Subject Areas**

Pharmaceutics and Drug Design (MS, PhD)

## **Related Areas**

- Clinical and Industrial Drug Development (MS, PhD)
- Industrial and Physical Pharmacy and Cosmetic Sciences (MS, PhD)
- Medicinal and Pharmaceutical Chemistry
- Natural Products Chemistry and Pharmacognosy (MS, PhD)
- Pharmaceutical Marketing and Management
- Pharmaceutical Sciences
- Pharmacoeconomics/Pharmaceutical Economics (MS, PhD)
- Pharmacy (PharmD USA PharmD, BS/BPharm Canada)
- Pharmacy Administration and Pharmacy Policy and Regulatory Affairs (MS, PhD)
- Pharmacy, Pharmaceutical Sciences, and Administration, Other

