

# PHARMACEUTICAL CHEMISTRY (PHCH)

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**PHCH 410 Introduction to Medicinal Chemistry (1 Credits)****Lecture:** 1

Introduction to Medicinal Chemistry Principles. Topics include structure activity relationships, drug metabolism and principles of drug discovery.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 411 Pharmaceutical Chemistry I Lab (1 Credits)****Lecture:** 0, **Lab:** 3

Pharmaceutical Chemistry I Laboratory (1) Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHCH 431. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHCH 431.

**Prerequisite(s):** PHCH 431 (may be taken concurrently)**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 412 Pharmaceutical Chem II Lab (1 Credits)****Lecture:** 1

Pharmaceutical Chemistry II Laboratory (1) Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHCH 432. Three hours of laboratory per week. Prerequisite/ Corequisite: Successful completion of or concurrent enrollment in PHCH 432.

**Prerequisite(s):** PHCH 432 (may be taken concurrently)**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 431 Pharmaceutical Chemistry I (3 Credits)****Lecture:** 3, **Lab:** 0

Pharmaceutical Chemistry I (3) Introduction to medicinal chemistry that includes review of chemistry of natural products; relationship of physicochemical properties to drug action; and biochemistry of carbohydrates, lipids, proteins, and enzymes. Three hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor. Corequisite: Concurrent enrollment in PHCH 411.

**Prerequisite(s):** PHCH 411 (may be taken concurrently)**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 432 Pharmaceutical Chemistry II (3 Credits)****Lecture:** 3

Pharmaceutical Chemistry II - Biochemistry (3) Discussion of hormones, vitamins, enzymes, nucleic acids, protein synthesis, biological oxidation, and intermediary metabolism. Drug metabolism and biochemical basis of common clinical laboratory tests discussed. Three hours of lecture per week. Prerequisites: PHCH 431 and PHCH 411. Corequisite: Concurrent enrollment in PHCH 412.

**Prerequisite(s):** (PHCH 431 and PHCH 411 and PHCH 412 (may be taken concurrently))**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 441 Biochemistry in Human Disease (4 Credits)****Lecture:** 4, **Lab:** 0

Biochemistry in Human Disease (4) Chemistry of biomacromolecules (e.g., proteins, lipids, carbohydrates, and DNA). Enzymology, metabolic pathways to energy utilization, nucleic acid metabolism, and recombinant DNA technology. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHCH 450 Special Problems (1-5 Credits)****Lecture:** 0, **Lab:** 10**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS