The field of pharmacology embraces the knowledge of the history, sources, physical and chemical properties, compounding, biochemical and physiological effects, mechanisms of action, absorption, distribution, biotransformation and excretion, and therapeutic and other uses of drugs. The Department of Pharmacology offers both undergraduate and graduate programs. The undergraduate program is designed to meet the needs of medical students and has been offered during the second semester of the second year. With the complete integration of the preclinical years in the medical program, pharmacology teaching occurs throughout the first two years within integrated, mostly organ-system based, courses. The graduate program consists of a minimum of two years of didactic and research training leading to the degree of Master of Science. The department also offers courses in the graduate program leading to the MS and PhD degrees.

**PHRM 240  Pharmacology and Therapeutics  48.0; 3 cr.**
A presentation of the chemistry, pharmacological effects, and therapeutic usefulness and toxicity of drugs. Designed to meet the requirements of the BS in nursing. *Prerequisite: BIOC 246.*

**PHRM 228  Pharmacology and Toxicology  108.72; 9 cr.**
A general course dealing with the chemistry, general properties, pharmacological effects on the various systems, therapeutic usefulness, and toxicity of drugs. A separate section deals with prescription writing and toxicology. Designed to meet the requirements of the second year medical program.

**PHRM 300  Pharmacology and Toxicology**
Similar to PHRM 228. *Offered to graduate students.*

**PHRM 303/304  Pharmacological Methods  0.96; 3 cr. (each)**
Methods of animal surgery, bioassay, and biochemical. *Prerequisite: PHRM 300.*

**PHRM 305/306  Enzymological Bioassays  0.96; 3 cr. (each)**
*Prerequisite: BIOC 211.*

**PHRM 307/308  Tutorial in Pharmacology  0.96; 3 cr. (each)**
An introduction to research.

**PHRM 309/310  Pharmacology Seminar  0.32; 1 cr. (each)**

**PHRM 314  Advanced Pharmacology and Therapeutics  48.0; 3 cr.**
Designed to meet the requirements of the MS degree in nursing. *Prerequisites: PHRM 240 and NURS 504.*
PHRM 260  Elective in Pharmacology  0.180-360.
An introduction to biochemical and physiological methods in use in pharmacology. One to two months.

PHRM 315  Principles of Pharmacology  19.21; 2 cr
A course that covers the basic principles of drug action including pharmacokinetics, pharmacodynamics, pharmacogenetics, drug resistance, tolerance and toxicity, and pharmacovigilance.

PHRM 395A/B  Comprehensive Exam  0 cr
Prerequisite: Consent of Adviser.

PHRM 399  MS Thesis  9 cr.