Department of Pharmacology and Toxicology

Chairperson: Sabra, Ramzi
Professors: Sabra, Ramzi; Simaan, Joseph
Professor Emeritus: Cortas, Nadim
Associate Professor: Khoueiry-Zgheib, Nathalie

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 is offered during the second semester of the second year. The graduate program consists of a minimum of two years of didactic and practical 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 biochemistry. 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>PHRM 315</td>
<td>Principles of Pharmacology</td>
<td>19.21; 2 cr</td>
<td>A course that covers the basic principles of drug action including pharmacokinetics, pharmacodynamics, pharmacogenetics, drug resistance, tolerance and toxicity, and pharmacovigilance.</td>
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<tr>
<td>IDTH 311</td>
<td>Foundations of Biomedical Science</td>
<td>90.40; 7 cr</td>
<td>An interdisciplinary course that presents the cellular and molecular concepts and principles that underlie the normal structure and function of the human body. It covers cellular structure and function, including mechanisms and regulation of gene expression, protein synthesis, structure and function, signaling mechanisms, membrane transport, energy metabolism, contractility, and excitability, and the basic principles of drug action.</td>
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<tr>
<td>IDTH 315/</td>
<td>Principles of Pharmacology</td>
<td>21.23; 2 cr</td>
<td>The course presents the basic principles of drug action including pharmacokinetics, pharmacodynamics, drug dosing, drug-receptor interactions, variability in drug response, pharmacogenetics, drug resistance, tolerance and dependence, the principles of drug toxicity, and the process of drug development and post-marketing monitoring.</td>
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<tr>
<td>PHRM 395A/B</td>
<td>Comprehensive Exam</td>
<td>0 cr</td>
<td>Prerequisite: Consent of Adviser.</td>
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<tr>
<td>PHRM 399</td>
<td>MS Thesis</td>
<td>9 cr</td>
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Graduate Catalogue 2013–14