Minor in Pharmacological Sciences—Program Description

The Minor in Pharmacological Sciences is an interdisciplinary program for students interested in obtaining an understanding of the mechanisms of drug action and/or the economics, social factors, ethical considerations and drug discovery as well as governmental regulation of drug development and marketing.

The Minor is organized around areas relevant to modern Pharmacology, and allows considerable flexibility in order to match the specific interests of students within the field. Courses offered for the Minor must be taken for a letter grade. All courses offered for the Minor must be passed with a grade of C or higher. Completion of the minor requires 21 credits. At least nine of these credits must correspond to BCP courses, including at least one 400-level course. Mentored research, either at the bench or faculty guided readings and writing, in relevant areas of Pharmacological Sciences (BCP 487) is an acceptable way to fulfill credit requirements. At least three of the courses must be taken at the upper-division level. Students wishing to pursue a minor in Pharmacological Sciences must develop a specific and explicit plan for its completion, in consultation with the designated advisor. An example of a typical distribution would be the following:

A. Two 100-level courses including BCP 111
B. Two 200-level courses including BCP 201
C. Three 300/400-level courses, including one of the following: BCP 401, 402, 405 or 487. (It is important to note that BCP 405 has no pre-requisites and is exclusively an online course. Hence it has already been offered six times since it was first launched a little more than the year ago, and it is currently our plan to offer it continuously hereafter. BCP 487 is also without explicit prerequisites. It is entitled “Research in Pharmacology” and includes both laboratory research AND independent study with a faculty mentor. The latter is maximally flexible.)

Course Offerings

Chemistry

CHE 129- E: General Chemistry IA (4 credits)
CHE 130: Problem Solving in General Chemistry (1 Credit)
CHE 131- E: General Chemistry IB (4 credits)
CHE 132- E: General Chemistry II (4 credits)
CHE 152- E: Molecular Science I (4 credits)
CHE 301: Physical Chemistry I (4 credits)
CHE 302: Physical Chemistry II (4 credits)
CHE 312: Physical Chemistry for the Life Sciences (3 credits)
CHE 321: Organic Chemistry I (4 credits)
CHE 322: Organic Chemistry IIA (4 credits)
CHE 326: Organic Chemistry IIB (4 credits)

Biology

BIO 101- E: Human Biology (3 credits)
BIO 115: E: Evolution and Society (3 credits)
BIO 201- E: Fundamentals of Biology: Organisms to Ecosystems (3 credits)
BIO 202- E: Fundamentals of Biology: Molecular and Cellular Biology (3 credits)
BIO 203- E: Fundamentals of Biology: Cellular and Organ Physiology (3 credits)
BIO 302: Human Genetics (3 credits)
BIO 310: Cell Biology (3 credits)
BIO 314: Cancer Biology (3 credits)
BIO 315: Microbiology (3 credits)

BIO 328: Mammalian Physiology (3 credits)
BIO 332: Computational Modelling (3 credits)
BIO 334: Principles of Neurobiology (3 credits)
BIO 361: Biochemistry I (3 credits)
BIO 362: Biochemistry II (3 credits)

Ecological Studies
EHI 340- H: Ecological and Social Dimensions of Disease (3 credits)

Economics
ECO 108- F: Introduction to Economics (4 credits)
ECO 327- F: Health Economics (3 credits)

History
HIS 293- H: Disease in American History (3 credits)

Pharmacological Sciences
BCP 111: American Drug Use and Abuse: Biomedical, Socioeconomic and Political Factors (3 credits)
BCP 201: Introduction to Pharmacology: The Molecular, Clinical, and Social Basis of Drug Use (3 credits)
BCP 401: Principles of Pharmacology (4 credits)
BCP 402: Advanced Pharmacology (4 credits)
BCP 403: Principles of Pharmacology Laboratory (2 credits)
BCP 404: Advanced Pharmacology Laboratory (2 credits)
BCP 405: Pharmacology to Pharmacy: Practical Clinical Aspects for Non-Clinicians (3 credits)
BCP 406: Pharmacology Colloquium (2 credits)
BCP 480: Introduction to Research Topics in Pharmacology (1 credit)
BCP 487: Research in Pharmacology (0-6 credits)

Political Science
POL 103- F: Introduction to Comparative Politics (3 credits)
POL 201- C: Introduction to Statistical Methods in Political Science (3 credits)

Psychology
PSY 103- F: Introduction to Psychology (3 credits)

Sociology
SOC 105- F: Introduction to Sociology (3 credits)
SOC 339- F: Sociology of Alcoholism and Drug Abuse (3 credits)