# The Ohio State University College of Medicine

## **Medical Pharmacology Minor (online)**

Department of Biological Chemistry and Pharmacology Contact: Professor Howard Gu 206F Rightmire Hall, 1060 Carmack Rd Columbus, OH 43210; 614-688-5741 Gu.37@osu.edu

The understanding of pharmacological principles underlies the treatment of all human diseases. The online minor in medical pharmacology educates undergraduate students in core areas of medical pharmacology and aims to place drugs and their effects in the context of well understood problems. This approach makes medical pharmacology easier to learn, provides a better understanding of the mechanisms of drug action, and affords a clearer rationale for use of specific drugs in human disease. The minor consists of 14 credit hours and is excellent preparation for admission to medical, dental, veterinary, optometry and nursing schools, and to biomedical sciences graduate programs.

Initial course: BIOPHRM 5600: "Introduction to General Pharmacology" (3 credits)

The additional 5 classes may be taken in any order: BIOPHRM 5050 "Molecular Basis of Oxidative Stress" (2 credits)

BIOPHRM 5300 "Molecular Pharmacology" (2 credits) BIOPHRM 5400 "Chemotherapeutic Drugs for Cancer and Infectious Diseases" (2 credits)

BIOPHRM 5500 "Cardiovascular Pharmacology" (2 credits) BIOPHRM 5824 "Pharmacology of the Nervous System" (3 credits)

(Please consult course catalog for possible prerequisites.)

#### Medical Pharmacology minor program guidelines

Required for graduation No

## Credit hours required

14 credit hrs. 1000 level courses shall not be counted in the minor.

## Transfer and EM credit hours allowed

A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE A student is permitted to overlap up to 6 credit hours between the GE and the minor

## Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

#### Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course work graded Satisfactory/Unsatisfactory may count toward the minor.

## X193

No more than 3 credit hours

## Minor approval

Minor program approval is not required, as long as there is no variation from the minor program sheet. Any variation from the minor as indicated must be approved by Professor Howard Gu, faculty contact.

# Filing the minor program form

The minor program form must be filed with the student's college/school at least by the time the graduation application is submitted to a college/school counselor.

# Changing the minor

Once the minor program form is filed in the college office, any changes must be approved by the academic unit offering the minor.

College of Arts and Sciences
Curriculum and Assessment Services
154 Denney Hall, 164 Annie & John Glenn Ave.
<a href="http://artsandsciences.osu.edu">http://artsandsciences.osu.edu</a>
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