

Pharmacology and Toxicology, Minor

ASPTXMIN

The human body comes into contact with countless chemicals and drugs during the course of a lifetime. You can explore how these foreign materials react with our bodies.

Description

A minor in pharmacology and toxicology provides students with biology and chemistry courses to help prepare them to explore how chemicals (drugs and environmental toxicants) affect living organisms.

Students learn to identify chemical characteristics leading to beneficial and adverse effects, describe how chemicals are evaluated for regulatory purposes, and summarize holistically how drugs and toxicants elicit their effects.

At a glance

- **College/School:** [New College of Interdisciplinary Arts and Sciences](#)
- **Location:** [West Valley](#) or [Online](#)

Program requirements

[2024 - 2025 Minor Map](#)

[Minor Map \(Archives\)](#)

The minor in pharmacology and toxicology consists of 15 credit hours. A minimum of 9 credit hours must be upper division. A minimum of six upper-division credit hours must be taken through the School of Mathematical and Natural Sciences. All courses used to satisfy requirements for the minor must be passed with a "C" (2.00) or better.

Required -- 6 credit hours

PTX 301: Basics of Pharmacology and Toxicology (3)

PTX 432 / LSC 432: Fundamentals of Pharmacology OR PTX 475 / LSC 475: Principles of Toxicology (3)

Courses taken for this category cannot be used to fulfill any other requirement in the minor.

Upper-Division Electives (choose three) -- 9 credit hours

BCH 361: Advanced Principles of Biochemistry or BCH 371: Modern Concepts in Biochemistry (3)

CHM 233: General Organic Chemistry I (3)

CHM 234: General Organic Chemistry II (3)

COM 415: Risk Communication (3)

PTX 325 / PSY 325: Physiological Psychology (3)

PTX 388: STEM Research Fundamentals (3)

PTX 430: Environmental and Human Toxicology (3)

PTX 432 / LSC 432: Fundamentals of Pharmacology (3)

PTX 450: Pharmacology and Toxicology Laboratory (1)

PTX 475 / LSC 475: Principles of Toxicology (3)

PTX 499: Individualized Instruction (3)

Courses taken for this category cannot be used to fulfill any other requirement in the minor.

Prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment requirements

GPA Requirement: None

Incompatible Majors: BS in pharmacology and toxicology, BS in biology (pharmacology/toxicology)

Other Enrollment Requirements: The following prerequisite courses do not count toward the minor, but may be needed in order to complete the requirements of the minor:

- BIO 181 General Biology I
- BIO 182 General Biology II
- BIO 340 General Genetics OR LSC 347 Fundamentals of Genetics
- BIO 353 Cell Biology
- CHM 113 General Chemistry I
- CHM 116 General Chemistry II

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major program or the minor. Courses taken for the minor may not count toward both the major and minor.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

Career opportunities

Relevant career paths include the pharmaceutical industry; regulatory fields such as environmental risk assessment; and graduate programs in public health, pharmacology, toxicology or environmental health sciences.

Contact information

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