

PHARMACOLOGY & TOXICOLOGY (GRADUATE GROUP)

College of Agricultural & Environmental Sciences

Laura S. Van Winkle, Chairperson of the Group

Group Office

Department of Environmental Toxicology, 4139 Meyer Hall; 530-752-4516;
Pharmacology & Toxicology Graduate Group (<http://ptx.ucdavis.edu/>);
Faculty (<https://ptx.ucdavis.edu/people/>)

Faculty

The more than 90 faculty in the graduate group represent at least 25 academic departments and organized research units within the College of Agricultural & Environmental Sciences, the College of Biological Sciences, the School of Medicine and the School of Veterinary Medicine.

- Pharmacology & Toxicology, Master of Science (<https://catalog.ucdavis.edu/departments-programs-degrees/pharmacology-toxicology-graduate-group/pharmacology-toxicology-ms/>)
- Pharmacology & Toxicology, Doctor of Philosophy (<https://catalog.ucdavis.edu/departments-programs-degrees/pharmacology-toxicology-graduate-group/pharmacology-toxicology-phd/>)

Pharmacology & Toxicology (Graduate Group) (PTX)

PTX 201 – Principles of Pharmacology & Toxicology I (5 units)

Course Description: First of three courses presenting fundamental principles of pharmacology and toxicology. Introductory overview of basic concepts in pharmacology/toxicology, followed by in-depth blocks on fate processes of chemicals in the body, fate processes in tissue selective responses, selective toxicity employed therapeutically.

Prerequisite(s): BIS 102; NPB 101.

Learning Activities: Lecture 5 hour(s).

Grade Mode: Letter.

PTX 202 – Principles of Pharmacology & Toxicology II (4 units)

Course Description: Second of three courses presenting fundamental principles of pharmacology and toxicology. Principles of pharmacodynamics and mechanisms of drug/toxicant actions.

Prerequisite(s): PTX 201.

Learning Activities: Lecture 4 hour(s).

Grade Mode: Letter.

PTX 203 – Principles of Pharmacology & Toxicology III (4 units)

Course Description: Integrated physiological systems, cardiovascular and nervous systems and how drugs and toxicants act to perturb function.

Prerequisite(s): PTX 201; PTX 202.

Learning Activities: Lecture 4 hour(s).

Grade Mode: Letter.

PTX 215 – Electrophysiology Techniques & Applications (3 units)

Course Description: Broad scope of topics in electrophysiology techniques and applications.

Learning Activities: Lecture 1.50 hour(s), Discussion 1.50 hour(s).

Cross Listing: MCP 215.

Grade Mode: Satisfactory/Unsatisfactory only.

PTX 230 – Advanced Topics in Pharmacology & Toxicology (1-3 units)

Course Description: In-depth coverage of selected topics for graduate students in Pharmacology-Toxicology and related disciplines. Topics determined by instructor in charge for each quarter.

Prerequisite(s): PTX 201; and consent of instructor.

Learning Activities: Lecture 1 hour(s), Discussion 1 hour(s), Seminar 1 hour(s).

Grade Mode: Letter.

PTX 277 – Molecular Mechanisms in Cancer & other Diseases (3 units)

Course Description: Exploration of cutting edge investigations on the underlying mechanisms of cancer biology, cancer therapy and other diseases. Current medical research in cancer and other diseases, as it spans the bench to bedside.

Prerequisite(s): MCB 121 or MCB 122; undergraduate or graduate introductory course in cell biology (such as BIS 104), and general biochemistry (MCB 121 or MCB 122) required; PTX 202 recommended.

Learning Activities: Lecture/Discussion 2 hour(s), Project.

Enrollment Restriction(s): Restricted to graduate standing or consent of instructor.

Grade Mode: Letter.

PTX 290 – Seminar (1 unit)

Course Description: Current topics in pharmacology and toxicology.

Learning Activities: Variable.

Grade Mode: Satisfactory/Unsatisfactory only.

PTX 290C – Advanced Research Conference (1 unit)

Course Description: Provide credit for participation in and attendance at research conferences.

Learning Activities: Lecture/Discussion.

Repeat Credit: May be repeated 3 time(s).

Grade Mode: Satisfactory/Unsatisfactory only.

PTX 299 – Research (1-12 units)

Course Description: Research with a faculty member in the Pharmacology & Toxicology Graduate Group.

Learning Activities: Variable.

Repeat Credit: May be repeated.

Grade Mode: Satisfactory/Unsatisfactory only.