

[Emphasis - Environmental Toxicology](#)

- [Ph.D. in Pharmaceutical Sciences](#)
- [Emphasis - Environmental Toxicology](#)

Ph.D. in Pharmaceutical Sciences **Description**

The Ph.D. in pharmaceutical sciences can be completed with an emphasis in environmental toxicology, medicinal chemistry, pharmaceuticals, pharmacology, pharmacognosy, or pharmacy administration.

Minimum Total Credit Hours: 57

Course Requirements

Requirements for each emphasis area are given in the respective program description sections.

Emphasis - Environmental Toxicology **Description**

The Ph.D. in pharmaceutical sciences with emphasis in environmental toxicology prepares a graduate to perform independent research and solve problems related to environmental health issues. Graduates are likely to find careers in academics, industry, or government service.

Course Requirements

The core requirements for the Ph.D. with an emphasis in environmental toxicology are:

- Phcl 547 Introduction to Environmental Toxicology (2 hours)
- Phcl 675 Principles of Pharmacology and Toxicology I (4 hours)
- Phcl 676 Principles of Pharmacology and Toxicology II (4 hours)
- Bisc 504 Biometry (3 hours)

Additional course work may include Medc 610; Phcg 620 (marine toxins, chemical ecology, and biochemical adaptations); Phcg 627-628; Phcl 581, 661, 669; Bisc 553, 632; Chem 512, 580; and Geol 532. These elective courses are determined in consultation with the student's advisory committee.

Other Academic Requirements

Doctoral students are also required to present a minimum of four seminars; one of these presentations can be over the student's dissertation research.

Doctoral students must complete a comprehensive examination (both written and oral components), administered by the student's advisory committee and the program's Admission, Retention, and Review Committee. Students must prepare a dissertation prospectus and prepare and orally defend a dissertation based on original, independent research.

