

# TOXICOLOGY OPTION

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This option is offered within the following major(s):

- Bioresource Research - College of Agricultural Sciences (<http://catalog.oregonstate.edu/college-departments/agricultural-sciences/other-degrees-programs/bioresource-research-bs-hbs>)

Toxicology concerns potentially hazardous chemicals in food and the environment and their effects on biological life. Toxic chemicals include pesticides such as insecticides and herbicides, industrial waste products, compounds that exist naturally in plants, those that contaminate foods as a result of fungal growth, and even some that are produced in the preparation and cooking of foods. Potential health effects from toxin exposures can range from immediate impairment of breathing or nerve function to chronic diseases, cancer, birth defects, and immune disorders. Toxicology research focuses on understanding mechanisms of toxicity, human and environmental risks from exposure, and means for reducing risks. Students will acquire laboratory skills in applied biochemistry and molecular, cellular, and organismal biology, preparing them for research or regulatory positions or biosciences/biomedical graduate/professional programs.

## Substituted Courses

CH 334 ORGANIC CHEMISTRY, CH 335 ORGANIC CHEMISTRY, CH 336 ORGANIC CHEMISTRY  
for CH 331 ORGANIC CHEMISTRY, CH 332 ORGANIC CHEMISTRY

## Required Courses

Code	Title	Hours
TOX 411	FUNDAMENTALS OF TOXICOLOGY	3
TOX 413	ENVIRONMENTAL TOXICOLOGY AND RISK ASSESSMENT	3

### Specialization and Breadth Courses

Select 23 credits approved by option faculty and research mentor	23
Total Hours	29

Option Code: 993