

ENV H 105 A Sp 19: Toxic Tales: Building Skills For Academic Success Through The Study Of Poisons

[Jump to Today](#)



ENVH 105: Toxic Tales: Building Skills for Academic Success Through the Study of Poisons

T and Th 2 credits - 10:30 -11:20 Instructional Center room 226

Instructors: Therese Mar, PhD and Antonio Abeyta, PhD

Course Description

In this course students will develop academic skills through the study of basic toxicology. With historic and present day “toxic tales,” we will explore some fundamental concepts of toxicology such as dose response, routes of exposure and factors influencing toxicity. In this context, students will develop skills for academic success, including higher order thinking skills such as analysis, synthesis and evaluation; presentation skills; study strategies; time management; personal accountability and resiliency. Finally, this course will provide opportunities for students to learn more about the field of environmental health and related careers.

Course Objectives

- Promote study skills and learning strategies necessary for success in STEM courses. This will include: understanding one’s learning style, reading textbooks, note taking, time management and organization, personal accountability, resiliency, and connecting to resources.
- Provide an introductory overview of the fundamentals of toxicology. By acquiring some familiarity to the basic building blocks of toxicology, students will be able to build upon their interest and knowledge in subsequent courses.

Evaluation and grading

This course includes lectures, group discussions on study skills, and student presentations. Grades are based on attendance, class participation, study skills assignments, a 2-3 page paper, and an exam

Paper and Presentation

Students will write a 2-3 page paper, and present to the class a historical or current topic “hot topic” related to toxicology. This may be something that has appeared in the news or scientific literature. This paper and presentation must include:

- background of the toxicant
- how people are exposed
- evidence from scientific literature
- Significance of this event to the field of environmental health/toxicology : eg. biological effects, routes of exposure, risk assessment, policy, environmental /social justice

Tentative Weekly Outline

Week 1

History of toxicology

The dose makes the poison

Study Skill of the week: Bloom's taxonomy, critical thinking skills

Week 2

Factors that affect toxicity: Absorption, Distribution, Metabolism and Elimination

Study Skill of the Week: Time management, avoiding procrastination

Week 3

Class activity: lemons and onions to illustrate link between exposure and health hazards

Forming hypothesis, observations, collecting and analyzing data, drawing conclusions

Study skill of the week: Note taking and reading text

Week 4

Toxic Tale of Lead

Study Skill of the week: Brain health – Improving Academics Through Mindfulness

Dr. Leah Spence and Dr. Todd Sperry

Week 5

Toxic Tale of Arsenic

Study Skill of the week: Presentation and communication skills

Week 6

Toxic Tale Mercury

Study skill of the week: personal accountability, motivation and goal setting

Week 7

Introduction to environmental justice: North Carolina Case study

Real People-Real Stories: Seeking Environmental Justice-Afton,NC

Study Skill of the week: Resiliency and connecting to resources

Week 8






Panel discussions from Environmental Health Students

Scott Clary – Expert vs Novices

Week 9-10

TBD

Course Summary:

Date	Details	
Thu Apr 25, 2019	 Note taking assignment (https://canvas.uw.edu/courses/1273341/assignments/4794711)	due by 11:59pm
Fri Apr 26, 2019	 Local vs. Broad Context reflection assignment (https://canvas.uw.edu/courses/1273341/assignments/4800843)	due by 11:59pm
	 HW 1 (https://canvas.uw.edu/courses/1273341/assignments/4793248)	
	 HW 2 (https://canvas.uw.edu/courses/1273341/assignments/4800802)	
	 Roll Call Attendance (https://canvas.uw.edu/courses/1273341/assignments/4794638)	