136 Life Lab: Ecology and People

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**Office Hours:** Will be set by the instructor at the first lab session.

**Supplemental materials:** While there is no formal laboratory manual or textbook for this course, handouts for each lab will be provided by your instructor or available online through Canvas.

**Course Website:** *This is a Canvas course.* Our Canvas site will have lecture outlines, and supplemental readings essential for the class. To get to the site go to your MyXU page and navigate to our Canvas site. It is important to get acquainted with Canvas early in the semester. Talk to your instructor several days (not hours) before an assignment is due if you are having problems.

*Not understanding how to use Canvas is not a legitimate excuse for missing deadlines.*

**Student learning outcomes:**
You will:

1. Apply the scientific method to answer questions in ecology.
2. Understand basic methodology used by environmental scientists to answer scientific questions.
3. Differentiate various types of research studies (e.g., correlational versus causative, observational versus experimental)
4. Develop analytical and quantitative skills commonly used by scientists.
5. Learn how to properly analyze, interpret, and report scientific data.
6. Critically analyze and distinguish claims based on science from misinformation based on pseudoscience.
7. Understand how peer review protects the scientific process from bias, mistakes, and fraudulent claims.

The natural sciences extend beyond an exploration of the natural world - they also inform us about our interrelationship to it. In this science elective course, you will improve your understanding of the scientific method and your ability to analyze claims and information regarding science through experiences in lectures and labs. In addition to knowing more about a specific scientific discipline, you will be better able to evaluate the use of science in society and everyday life in an informed manner.

**Grading:** Your grades will be based on tests, lab assignments, and participation. You will receive two separate letter grades for the lecture and laboratory component of the course.

<table>
<thead>
<tr>
<th>Grade Distribution</th>
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<tbody>
<tr>
<td>Quizzes (4x30):</td>
<td>120 pts.</td>
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<tr>
<td>Final Exam:</td>
<td>90</td>
</tr>
<tr>
<td>Assignments:</td>
<td>60</td>
</tr>
<tr>
<td>Participation:</td>
<td>30</td>
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<tr>
<td><strong>Total</strong></td>
<td>300 pts.</td>
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**Tests:** There will be 4 quizzes (30 points each) and one larger comprehensive final exam (90 pts.).

**Assignments:** Periodic in-class and homework assignments will be due throughout the course. Each assignment will be worth between 5 – 10 pts. Unless otherwise noted all homework assignments should be typed, double-spaced, printed two-sided & stapled. Note that assignments should be handed in at the beginning of the lab in which they were assigned.
Participation: If you do not attend lab, you cannot participate! If you are not actively performing lab assignments with your group you are not participating! This portion of your grade will be based in part on attendance (lab) and in part on your active involvement in the lab.

Late Penalty: Late assignments will be marked down 5% for each day (or partial day) they are late.

Final Grade: The course will be graded on a standard scale (i.e., not curved). If your score is close to the next letter grade (above or below) “+” and “-” grades will be used.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>93-100%</td>
<td>A</td>
</tr>
<tr>
<td>87-89%</td>
<td>A-</td>
</tr>
<tr>
<td>83-86%</td>
<td>B+</td>
</tr>
<tr>
<td>80-82%</td>
<td>B</td>
</tr>
<tr>
<td>77-79%</td>
<td>B-</td>
</tr>
<tr>
<td>73-76%</td>
<td>C+</td>
</tr>
<tr>
<td>70-72%</td>
<td>C</td>
</tr>
<tr>
<td>67-69%</td>
<td>C-</td>
</tr>
<tr>
<td>60-66%</td>
<td>D+</td>
</tr>
<tr>
<td>59% or less</td>
<td>F</td>
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</tbody>
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Electronic Use Policy: Note that failure to follow the guidelines below will result in a reduced participation grade.

Cell phones: Phones may be left on vibrate for emergency notification purposes only. They should be stored off your desk and in a bag or pocket at all times. There is a zero tolerance policy for texting/cell phone use in class. If you expect an important phone call, please inform your instructor before class and quietly excuse yourself when you receive it.

Laptops & Tablets: Computers are to be used for note taking purposes only during class. They are not to be used for surfing the internet, Facebook or other activities unrelated to the ecology class. Some labs will require computer use. During these labs computers should be used for the intended purpose only as described by the instructor and must be properly put away at the end of the lab.

This course is part of the Xavier Core Curriculum, which aims to develop people of learning and reflection, integrity and achievement, in solidarity for and with others. It addresses the following core learning objectives at the intermediate level:

- 1a: Students recognize and cogently discuss significant questions in the humanities, arts, and the natural and social sciences.

And it includes the following core learning objective(s) at the introductory level:

- 4b: Students discuss and evaluate what constitutes human wellness.
- 5b: Students examine the interconnections between humans and the natural environment.

Any student who feels s/he may need an accommodation based on the impact of a documented disability should contact me personally to discuss your specific needs. Please also contact the Learning Assistance Center at 745-3280 on the fifth floor of the Conaton Learning Commons to coordinate reasonable accommodations.

The Staff in the Office of Student Success is available to assist students to make the most of their Xavier experience. Personal staff consultations, success coaching, referrals to on-campus Solution Centers, and guiding students to effectively navigate their college experience are central to our work. Please visit www.xavier.edu/student-success to learn more or visit us in the Conaton Learning Commons.