****

**Instructors:** Dr. Rory Carroll and TA Hannah Assour

**Email:** roc100@pitt.edu, hannah.assour@pitt.edu

**Social:** @technaturalist, @HannahDinAssour

B I O S C 1 4 2 0

**Wildlife Management**

Summer 2024

**Phone:** Dr. C’s cell - 603-833-7763

**Class Location:** Pymatuning Lab of Ecology  
 **Dates:** July 15 – August 2

**COURSE DESCRIPTION**

***A thing is right when it tends to preserve the integrity, stability, and  
 beauty of the biotic community. It is wrong when it tends otherwise.***

— Aldo Leopold

Wildlife practitioners are tasked with making difficult decisions on a daily basis. Aldo Leopold, the founder of the field of wildlife management, gave us this simple but challenging foundation on which to base those decisions.

This course is an exploration of how wildlife ecology, population dynamics, and habitat relationships can be applied to preserve the integrity, stability, and beauty of the biotic community. We will explore the theory and practice of wildlife management through field trips, readings, discussions, and hands-on practice. Special consideration is given to population management of game species, but topics related to broader species conservation efforts and human dimensions of wildlife management will be discussed as well. Students will develop field, lab, computer, and communication skills necessary for success in wildlife careers.

**LEARNING GOALS**

**Upon completion of this course, students will be able to…**

1. Describe the origins and overarching goals of wildlife management in North America
2. Discuss ecological theories and concepts relevant to managing wildlife populations
3. Demonstrate field techniques that aid in habitat and population management
4. Assess habitat suitability and threats to sustainable wildlife populations
5. Critically evaluate primary literature and apply it to wildlife management decisions
6. Synthesize complex information to create wildlife management plans that address real-world issues
7. Clearly communicate ecological concepts

**MATERIALS**

- **There is no required text**. Reading materials will be provided by the instructor: PDFs of primary literature, state management plans, species identification guides, etc.

- **Recommended**: Field guides for various taxa of the region. These are always handy to have!

- **Optional**: [*Principles for Management of Fisheries and Wildlife*](https://titles.cognella.com/82121-1B-URT) (Powell). A helpful guide to issues and decision-making frameworks in wildlife management.

- **Optional**: [*A Sand County Almanac*](https://www.aldoleopold.org/store/a-sand-county-almanac/) (Leopold). An inspiring book on philosophy of wildlife ecology & conservation.

- **Optional**: [*The Wildlife Techniques Manual*](https://jhupbooks.press.jhu.edu/title/wildlife-techniques-manual) by N.J. Silvy (ed.). Great for those pursuing careers or grad school in a wildlife discipline. A copy will be available for you to reference.

**GRADING**

**More detailed information will be discussed in class, but this is a breakdown of the course grading.**

**Technical summaries (3 x 9 points)**

Written and graphical summaries of skill-building activities. One will be due at the end of each week. These are meant to be short assignments that document your completion and mastery of class activities: habitat assessment, radio telemetry, and distance sampling.

**Course reflection (6 points)**

You will respond to a series of questions, in writing, that ask you to assess what you’ve gained from the course.

**Quizzes (3 x 10 points)**

“Open book” quizzes given on Friday afternoon of each week that will test your knowledge and ability to identify species, showcase skills, read and respond to wildlife-related content, and research and apply appropriate information.

**Management plan (15 points)**

Formal report on the course-long team project, in which group(s) of students will assess habitat, inventory species, and develop a management plan for one or all of PLE’s properties. Group dynamics and participation (assessed individually by each group member) will be part of your grade for this project.

*\*As your group works to inventory the fauna and flora at your site, I strongly encourage you to log all the species you encounter on iNaturalist under PLE’s project:*[***Pymatuning lab of ecology biodiversity challenge***](https://www.inaturalist.org/projects/pymatuning-lab-of-ecology-biodiversity-challenge)***!***

**Presentation (10 points)**

Formal presentation of the group management plan. Each group present to classmates and others in the PLE community on the results of their project and recommendations for management. Group dynamics and participation (assessed individually by each group member) will be part of your grade for this project.



**Field notes (12 points)**

A collection of writings, illustrations, questions, observations recorded during our daily field experiences and trips. You will be graded on your organization, thoroughness, and your ability to thoughtfully reflect on all our field experiences. While a field notebook almost always includes hand-drawn visual aids that support written notes (illustrations of new species, maps, study designs, etc.) you will ***NOT*** be graded on your artistic ability! These will be done by hand, but you can make reference to photos in the notes, as long as the notes include a description and identifier and the photo is sent to the instructor with that identifier as the file name.

*Grades are rounded to the nearest whole number using standard rounding rules.*

**IMPORTANT NOTES**

**Students are expected to be in class each day, on time, and prepared for the day’s activity.** This means having thoroughly engaged with any assigned material, prepared for the session’s planned activity, and ready to actively participate. We all must hold one another accountable to the standard of full engagement with the course and with each other. This is a small class, so it’s very noticeable if a student is not actively participating, and everyone suffers!

**Students are expected to have field-hardy clothing and footwear for daily field excursions. This includes closed-toed shoes, appropriate clothing, sun and insect protection, water, field notebook and pens/pencils, and whatever else you may need.** Please let me know if you have any allergies related to insect bites or plant exposure (e.g., poison ivy). Be prepared to stay in the field during inclement weather conditions (e.g., rain coat, waterproof bag for cell phones, papers, etc.), though policies concerning dangerous weather will be strictly adhered. **Announced departure times for field trips are firm; if you are late, you may be left behind.**

**IMPORTANT NOTES, continued**

**You have the right to be treated with respect by me and your classmates, and an obligation to respect others.** We can all expect each other to do our part to maintain a class environment of respect and civility. This includes being punctual, staying up to date with readings and assignments, actively participating, and keeping a positive and constructive attitude in all your interactions.

There will be times when you are at a field site with your group without the instructor or TA being immediately present. If any issues arise, you can call me on my cell phone – 603-833-7763. Please put this in your phone in case you need it in the field! **You should NEVER be alone in the field. Please be sure you always have at least one other group member with you and within earshot.**

**ACADEMIC INTEGRITY POLICY**

***Ethical behavior is doing the right thing when no one else is watching* — Aldo Leopold**

**Be an ethical person… don’t cheat**. No grade is worth sacrificing your personal integrity. As members of the PLE community, we all agreed to adhere to the [Academic Integrity Code](https://www.as.pitt.edu/faculty/policies-and-procedures/academic-integrity-code), and I take this very seriously. If I suspect you have violated that code, you will at minimum receive a 0 on the assignment and will be required to participate in the procedural process as outlined in the University Guidelines on Academic Integrity.

**Academic misconduct includes, but is not limited to:**

* Receiving or providing assistance on an assignment in a way not explicitly authorized by the instructor. This includes the use of artificial intelligence technology.
* Submitting the work of another person in a manner that represents the work to be one's own.
* Presenting as your own the ideas, representations, or words of another person without customary and proper acknowledgment of sources.
* Sharing of any audio, video, presentations, or other class material without permission from instructor.

**ACCESSIBILITY**

**I am committed to providing a fair, accessible learning environment for all.** If you have a disability for which you are or may be requesting an accommodation, please let me know as soon as possible so we can discuss an arrangement that works for everyone.

**EQUITY, DIVERSITY, and INCLUSION**

I do not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University’s Title IX policy. I am committed to taking prompt action to end a hostile environment that interferes with the University’s mission. For more information about policies, procedures, and practices, visit the [Civil Rights & Title IX Compliance web page](https://www.diversity.pitt.edu/civil-rights-title-ix-compliance).

I ask that everyone in the class strive to help ensure that other members of this class can learn in a supportive and respectful environment. If there are instances the violate the spirit or letter of this agreement, please contact me or the Title IX Coordinator at 412-648-7860 or [titleixcoordinator@pitt.edu](mailto:titleixcoordinator@pitt.edu). Reports can also be filed online. If you choose to report this to me, I am required to communicate this to the University’s Office of Diversity and Inclusion. If you wish to maintain complete confidentiality, you may contact the University Counseling Center (412-648-7930).

**SCHEDULE OF TOPICS & ASSIGNMENTS**

The schedule and materials are subject to change. Any changes will be announced ASAP in class. Materials refer to readings that are provided on the course Canvas page. Times are approximate, especially for early morning and evening windows (e.g., some activities may not take the full allotted time).