Field Herpetology 2017

EEB 3266: Field Herpetology

May Term, 2017

http://jockusch.eeb.uconn.edu/teaching/field-herpetology/
Course Duration: May 8th – May 26th
Meeting Time: Monday through Friday, 9:00am – 12:00pm in TLS 179
Depending on weather conditions, some classes will be held at night 7-10 PM instead, allowing us to observe nocturnal amphibians.

Instructor

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Office hours: by appointment, often right after class.

Course Description and Objectives

Course Description:
Herpetology is the scientific study of the amphibians and reptiles. In this course, we will examine the diversity of both groups, and learn about their basic biology. Students will learn about the diversity, ecology, physiology, behavior, adaptation and identification of the local herpetofauna through direct field experience. There will be various opportunities to observe these animals in the field during the day and at night, through which students will become familiar with standard methods for surveying for and handling these species. Students will apply this knowledge by developing and carrying out a short independent research project.

Course Objectives:
After completing this course the student will be able to:

- Identify Connecticut's amphibians and reptiles by sight, and in the case of frogs by sound as well.
- Describe the biology of local herpetofaunal species and their corresponding families
- Effectively use standard field techniques and methods for studying herpetofauna
- Apply with proficiency the scientific method to assess questions and design and carry out a project pertaining to herpetofaunal biology.

Assignments

Project: Students will formulate and carry out an instructor-approved group research project using local Connecticut herpetofauna. Students are expected to identify a research question, develop a hypothesis, and test this hypothesis using field methods learned in class.

- As the semester progresses, students will independently prepare small assignments and drafts designed to guide students when preparing to write their full research report. Guidelines for these assignments will be detailed during lecture.
- At the end of the semester, students will independently prepare a final report about their research project (5-7 pages, double spaced, 12 pt Times New Roman font, 1 inch margins), including relevant background information, the materials and methods used, results of the experiment, results of any data analysis performed, and a discussion of the results.
- At the end of the semester, students will prepare a 15-minute presentation about their project, and present on the final day of class.
- Both the paper and presentation will be graded on content, quality, and clarity.

Final Exam: The final exam will be composed of short-answer questions based on Connecticut herpetofauna identification (both written descriptions and identification of preserved specimens), the natural history of Connecticut herpetofauna, predicting occupancy of particular habitat types, field techniques, and lecture content.

Field notebook: Students are expected to keep a formal notebook for observations of Connecticut herpetofauna in the field. Field notebooks will be graded based on format (we will use the Grinnellian field notebook system), completeness, degree of detail in observations, and relevancy of details noted. Notebooks will be collected and graded at the end of each week.

Course Procedures and Policies

Grades:

- **Paper on project:** 150 pts total
    - Iterative Drafts: 50 pts
        - Proposed research questions
        - Proposed hypotheses
        - Full research proposal
        - Drafts of: introduction, methods, results, and discussion
    - Final Paper: 100 pts
- **Presentation on project:** 50 pts
- **Final exam:** 100 pts
- **Field notebook entries:** 75 pts
- **Participation:** 25 pts
- **TOTAL:** 400 pts

Attendance:
Due to the accelerated and intensive nature of this summer course (3 hours, 5 days a week, 3 weeks), full attendance is expected, barring any illnesses or emergency. Missing a single class is roughly the equivalent of missing an entire week of a course during a standard semester, so it's very important that you attend every class.

Academic Integrity:
Plagiarism and cheating are violations of the student conduct code, and may be punished by failure in the course or, in severe cases, dismissal from the University. For more information, see Appendix A of the Student Conduct Code.

Disabilities:
If you have a disability for which you may be requesting an accommodation, you should contact a course instructor and the Center for Students with Disabilities (Wilbur Cross Building, Room 201) on the first day of the semester.

Course Materials

Required:

- A Field Guide to Reptiles and Amphibians of Eastern and Central North America, 4th edition; R. Conant and J. Collins; ISBN-10: 0395904528
- Bound field notebook (composition book is fine and cheap)
- Clothes you are willing to ruin

Recommended:

- Herpetology, 4th Edition; Pough, Andrews, Crump, Savitzsky, Wells, and Brandley; ISBN-10: 1605352330
- Boots
- Waders (will be available if you don't have a pair)
- Headlamp (will be available)
- Insect repellent
- Sunscreen
- Electronics dry bag

Schedule (Subject to Change)

Date	**Lecture**	**Field Agenda**
May 8	Introduction, Syllabus, IACUC Training, Field Notebooks	UConn Forest Fenton Tract, Red and Green Trails
May 9	Salamanders of Connecticut	Hillside Environmental Education Park (HEEP)
May 10	**RESEARCH QUESTIONS DUE (9 am)** Frogs and Turtles of Connecticut	UConn Forest Fenton Tract, Fenton River and Fenton River Meadow
May 11	**HYPOTHESES DUE (9 am)** Lizards and Snakes of Connecticut	Mansfield Hollow
May 12	**FIELD NOTEBOOKS DUE (9 am)** **RESEARCH PROPOSAL DUE (5 pm)** Habitats and Field Techniques	Bigelow Hollow
May 15	Physiology	Albert E. Moss Sanctuary
May 16	**DRAFT INTRODUCTION DUE (9 am)** Field Research Day	TBD
May 17	**DRAFT METHODS DUE (9 am)** Locomotion	UConn Forest Moss Tract ("the Dusky site")
May 18	Field Research Day	TBD
May 19	**FIELD NOTEBOOKS DUE (9 am)** **DRAFT RESULTS DUE (5 pm)** Feeding	Sawmill Brook Preserve
May 22	Behavior and Reproduction	UConn Forest North Eagleville Tract, Bonemill Pond
May 23	**DRAFT DISCUSSION DUE (9 am)** Field Research Day	TBD
May 24	Conservation	TBD
May 25	**FINAL EXAM**	Optional Field Excursion, TBD
May 26	**FIELD NOTEBOOKS DUE (9 am)** **PAPERS DUE (9 am)** **PRESENTATIONS**	