

Course Information

NTRES 2100 – Introductory Field Biology

Course description: Introduction to field identification, natural history, and study of plants, animals, and natural systems. Emphasizes the interaction of students with nature, the recording of ecological phenomena, and advancing student awareness and understanding of the natural environment, including ecological concepts (e.g., ecosystem, community, habitat, and niche). Students work cooperatively in hands-on field lab exercises to build skills in the identification and classification of native biota and their natural history. Students conduct an independent field research project in which they formulate research questions from field observations, develop a sampling plan, collect field data, and interpret those data for a research report/presentation. Students maintain a detailed field journal of natural history observations from field labs and independent observations.

Lectures: Tuesday: 11:15 AM–12:05 PM
Bradfield 101

Laboratories: Tuesday and Thursday: 1:25–4:25 PM
Wednesday and Friday: 1:25–4:25 PM
301 Rice Hall, unless otherwise instructed

Weekend trips (2):

Arnot Forest, September 24th – 25th. Departure 12:00 PM on Saturday.
We stay overnight at Arnot and return to campus around 5 pm on Sunday.

Oneida Lake, October 1st (Tue / Thu lab group) or October 2nd (Wed / Fri lab group). Depart 7:30 AM and return approx. 6:00 PM on same day.

Instructors: Paul Rodewald (pgr35@cornell.edu), by appointment
Marc Goebel (mg567@cornell.edu), by appointment

Teaching Assistants: Martin Feehan (mjf322@cornell.edu)
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Office hours: Tuesdays, 12:05 – 1:05 pm, G09 Fernow Hall

Communication: <http://blogs.cornell.edu/fieldbio2100/>

Grades: Student grades will be based on the following, percentages in parentheses:

- Attendance / (10%) ^{1/}
- Homework, lab results, assignments (10%)
- (2) Field / lab exams – plants (25%)
- Lab exams – mammals & birds (10%)
– reptiles, amphibians & fish (10%)
- Field research project (25%) ^{2/}
- Field journal (10%) ^{3/}

^{1/} Note on attendance: **Attendance in field labs/trips is required**, but limited accommodation will be made for excused absences. Students must communicate **with course instructors** by **September 2nd, 2016** about any Cornell-related activities (athletics, band, sports, etc.) or other planned activities (academic conferences) that will conflict with weekly labs or weekend field trips.

^{2/} Students will conduct an independent field research project on a topic of their choice. Each student will write a research proposal, conduct the actual research related to some aspect to natural history / field ecology. Results will be reported in both a written report and an oral presentation during the last week of labs. Additional details will be provided in a separate document.

^{3/} Students will maintain an active journal describing their natural history observations and field experiences in field labs/trips, field work for research projects, and other outings. Journal writing is a time-honored tradition in field biology and will help students to learn species identification and natural history. Journals will have a specific format and will be described in more detail separately.

Required texts and equipment:

Sibley Guide to Trees by D. A. Sibley (2009)
(ISBN 978-0-375-41519-7)

The Peterson Field Guide Series: A field guide to trees and shrubs
(ISBN 978-0-395-35370-7)

Rite in the Rain All-Weather Journal No. 373
(ISBN 978-1-932149-87-6)

A Sleeping bag (3-season) and sleeping pad (if available)

Optional:

Amphibians & Reptiles of New York State by J.P. Gibbs et al. (2007)

Field Guide to Reptiles and Amphibians by J.T. Collins & R. Conant (1998)

Mammals of North America by R.W. Kays & D.E. Wilson (2009)

Freshwater Fishes of the Northeastern United States by R.G. Werner (2004)

Sibley Field Guide to Birds of Eastern North America by D.A. Sibley (2003)
Kaufman Field Guide to Insects of North America - E.R. Eaton & K. Kaufman (2007)

Course learning outcomes:

Outcome 1: Students will be able to identify and characterize ecosystem types, ecological communities, and habitats in the northeastern region based on key structural features, associated taxa, and the physical environment.

Outcome 2: Students will be able to identify approximately 200 common taxa of plants and animals in the northeastern region, and will understand the natural history of those species and their relationship to the environment.

Outcome 3: Students will have an understanding of field research methods and approaches in a variety of ecological disciplines.

Outcome 4: Students will be able to formulate research questions from field observations, develop a sampling plan, collect field data, and interpret and discuss their results in relation to research questions.

Outdoor labs and weekend field trips will meet at 301 Rice Hall at 1:25 pm at scheduled afternoons (unless otherwise indicated). Students are **required** to wear appropriate clothing on all off-campus field trips (those involving van/bus travel). Appropriate attire includes long pants, hiking shoes / boots (or tall rubber boots or sneakers), and depending on weather conditions, a rain jacket and/or warm clothing. Field trips last up to 3 hours, so please be prepared and bring a water bottle and a snack.

Academic integrity: Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work, unless it is specifically indicated by course instructors that students may work in groups.

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to [Turnitin.com](https://www.turnitin.com) for the detection of plagiarism. All submitted papers will be included as source documents in the [Turnitin.com](https://www.turnitin.com) reference database solely for the purpose of detecting plagiarism of such papers. Use of the [Turnitin.com](https://www.turnitin.com) service is subject to the Usage Policy posted on the [Turnitin.com](https://www.turnitin.com) site.

Course notes: The Cornell University Copyright Policy stipulates that copyright in course materials usually belongs to the faculty member who creates them. [Cornell copyright policies](https://www.cornell.edu/copyright)

Disabilities: We will make appropriate accommodations for students with disabilities. Please contact us during the first week of class and make requests as soon as possible and use the on-line form available at: <http://newstudents.cornell.edu/>

Religious holidays: Cornell is supportive of students who wish to practice their religious beliefs. Additionally, there are some specific, legally mandated considerations that may affect your course's schedule. The religious holiday statement is at:

<http://www.theuniversityfaculty.cornell.edu/pdfs/holidaystatement.pdf>

A listing of religious holidays is at:

<http://dos.cornell.edu/sites/dos.cornell.edu/files/curw/documents/Religious-Holidays-2015-2016.pdf>.