

Lecture Information

Instructor:
Prof. Mark E. Hauber, Dept. of Animal Biology, School of Integrative Biology, UIUC
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Office Hours: 10-10:50 AM Fridays or by appointment

Ornithology is the biological study of birds. Here we survey the structure, function, ecology, behavior, and evolution of the birds of the world; the laboratory is devoted to anatomy and identification; and field studies are devoted to identification and tracking of wild birds.

4 CR for both undergraduates and graduates. Prerequisite: IB 203; or written consent of instructor.

This is an optional course for the IB major under Area I: Organismal & Evolutionary Biology. An honors credit project is available upon request.

Your learning outcomes include (1) the proximate and ultimate patterns and causes of biological diversity, form, and function in birds, (2) practical applications regarding and the identification of Illinois’ avifauna, and (3) the ability to assess and synthesize readings from primary scientific literature on birds.

Schedule: 11:00 – 11:50 AM, MWF, 2083 Natural History Building


Course Web Site: Materials for the course will be posted on the course Moodle site: https://learn.illinois.edu

Exams and Grading

Course Grading Philosophy
1) I do not 'curve' individual exams or assignments. Instead, grade cut off points will be assigned based on the distribution of student point totals at the end of the semester.

2) I use the standard 90, 80, 70, 60% scores as starting cutoff points for A, B, C, and D grades, respectively, with options for plus grades (A+, B+, but not A-, B-). Depending on the distribution of points at the end of the semester I may drop the cut off points slightly (e.g., 88% might become the A cut off) but I will not raise the cut-offs.

3) Reading assignments for the lectures are provided on the schedule below. The expectation is that you will read this material before coming to class and/or lab. Material from the text will be covered quickly and used as a starting point to explore topics in more detail.

5) There will be three non-cumulative exams and one writing assignment (which will involve reading and summarizing an original peer-reviewed research article).
6) The exams, including the final exam covering lecture and reading materials will be held online (no lecture on those days). The final exam will be held during the finals period. Lab practicals will be held during the lab schedule in the lab space; you must attend in person to take the lab practical.

Exams and practicals can be made up with proper excuse and documentation. If you are ill, you need a doctor’s or McKinley letter – a note from the Emergency Dean does not substitute for a doctor’s excuse. You must contact Dr. Hauber before the exam or as soon as possible after the exam to ensure that your absence is excused and that a makeup exam can be scheduled.

**Point Allocation**
Exams - 60%
Writing exercise - 15%
Lab Practicals - 25%

**Contesting Grades**
If you feel that your assignment or exam has been graded inappropriately, you are welcome to contest grades via a written statement within one week of receiving the graded assignment. To contest a grade, you must submit a written statement (preferably via email) of what you believe was graded incorrectly and why the grade should be altered. No oral contesting of grades will be considered, nor will we consider any contest of grades submitted after one week.

**Disabilities Statement**
If you require special accommodations, please tell Dr. Hauber as soon as possible. All accommodations will follow the procedures as stated in Article 1-110 of the Student Code ([http://studentcode.illinois.edu/article1_part1_1-110.html](http://studentcode.illinois.edu/article1_part1_1-110.html)). To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@illinois.edu.

**Academic Integrity** is essential to maintaining a learning environment that promotes excellence. We expect that all students will complete all academic and scholarly assignments with fairness and honesty. We adhere to the academic misconduct guidelines outlined by the Student Code of Conduct and will report any suspected academic misconduct. Please see [http://studentcode.illinois.edu/article1_part4_1-402.html](http://studentcode.illinois.edu/article1_part4_1-402.html) for additional details. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact Dr. Hauber.

**Lab Information:** Monday or Wednesday 8:00-10:50AM

**Location:** 4072 Natural History Bldg.

**Teaching Assistants:**
All Lectures and Labs—Elise Nishikawa ([nishika2@illinois.edu](mailto:nishika2@illinois.edu)),
Field Trips & Mistnetting Labs—also: Janice Kelly ([jkkelly2@illinois.edu](mailto:jkkelly2@illinois.edu))

**Lab Attendance Policy:**
Attendance is expected at all scheduled laboratory or field work sessions. Because of limitations on lab space and staffing, missed labs cannot be made up beyond the weeks for which they are scheduled. Limited accommodation of students with conflicts may be made in other lab sections within the same week – **this must be cleared with Dr. Hauber or the TA.**

**Laboratory Safety**

Potentially hazardous reagents and materials are employed in modern biology. As is the case with any tool, these are hazardous only when handled improperly. **One way to ensure your personal safety is to read the laboratory instructions carefully before coming to class and to adhere to the following general instructions when you are in the lab.**

- Wear close-toed shoes (NOT sandals) at all times in the laboratory.
- Do NOT store, prepare or consume food or beverages, including coffee, in the laboratory.
- Keep drawers and cabinets closed when you are not accessing materials inside.
- Keep bottles, reagents and equipment away from the edges of counters and benches.
- Clean up any spills immediately.
- Learn the locations of safety and first aid equipment and use them when appropriate.
- Wash your hands before leaving the laboratory.
- Clean your lab bench after exercise, including the floor area if necessary. Discard any hazardous or biological materials according to the instructions provided by the Teaching Assistants.

**Coats, backpacks and other personal belongings:**

The IB 202 lab space is rather cramped. To avoid injuries that could result from students or instructors tripping over backpacks or coats hung over the backs of chairs it is critical that these items be placed in the designated storage area. The lab book, a notebook and writing implements are the only items that should accompany you in your lab space.

**Sharps:**

Some of the exercises you will perform in the laboratory will involve dissections using razor blades or other cutting instruments. A specially designated “sharps” container will be available for disposing of used blades. Do not discard these items in the lab trash containers and do not leave them lying around on the lab benches after completing your work. The sharps container is also the appropriate place to dispose of any broken glassware.

- Do not use a double-edged razor blade as is out of the package. Carefully bend and break them in half to form two single-edged blades and cover the broken side with a piece or two of lab tape to prevent cuts.
- Do not pick up broken glass with bare hands. Use gloves or sweep up. Wet paper toweling can be used to collect fine pieces of broken glass.

**Chemicals:**

Some potentially hazardous chemicals will be used in the laboratory exercises. The Teaching Assistants will point these out at the beginning of each lab period and instruct you how to safely dispense, use and dispose of these materials.

- Never pour organic chemicals down the laboratory sink: they will be collected in specially marked containers. Should some organic reagents be accidentally discarded in the sink, flush them down the drain with large amounts of tap water.
• In some experiments the use of safety goggles/glasses is recommended to prevent eye damage.
• Never mix organic solvents with strong acids.

Computers:
• It is inappropriate to use lab computers for checking and sending email, with the exception of exchanging electronic data files generated in the lab. Web surfing and visiting chat rooms or social networking sites on lab computers is not acceptable activity.
• Students may not make changes to computer settings, folders or programs.
• No software may be loaded onto course computers.
• With the exception of LoggerPro, computer software may not be copied. Software piracy is a crime.

### Week 1
- **17-Jan**
  - Why study birds?
  - A TEDs perspective

### Week 2
- **22-Jan**
  - A personal history of ornithology

### Week 3
- **26-Jan**
  - Evolution by natural selection

### Week 4
- **2-Feb**
  - Vocalizations and other sonations

### Week 5
- **7-Feb**
  - Flightlessness

### Week 6
- **2-Feb**
  - "A brain for each season"

### Week 7
- **9-Feb**
  - Sensory systems

### Week 8
- **16-Feb**
  - Endocrine systems

### Final Exam
- **4-May**
  - Final Exam Online

### Reading From the Handbook of Bird Biology or article PDF
- Chapter 1
- NO LAB THIS WEEK

### Lab Streams (M/W)
- Midterm Practical
- Lab Streams (M/W)

### Lab Reading
- Chapter 7
- Comparative Analysis
- Hauber 2003