

**Ornithology
IB / NRES 461**

Syllabus for Spring 2026

Instructors:

Janice Enos

Office: 2066 Forbes Building

email: jkkelly2@illinois.edu

T.J. Benson

Office: 2080 Forbes Building

Email; tjbenson@illinois.edu

Kirk Stodola

Office: 2108 Forbes Building

Email; kstodola@illinois.edu

Teaching Assistants:

Holly Coates

Office: 2104 Forbes Building or S217 Turner Hall

email: hcoates2@illinois.edu

Mac Chamberlain

Office: 2063 Forbes Building

email: maclc2@illinois.edu

Office Hours for all instructors: By appointment.

Course Description: 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 taxonomy and identification; and field studies are devoted to identification and tracking of wild birds. This is a 4 credit-hour course for undergraduate and graduate students.

Meeting Times and Locations

Lecture: MWF 11:00-11:50 am; Natural History Building 2083

Lab: M or W 8:00-10:50 am; Natural History Building 4072

Learning Outcomes: The goal of this course is to introduce students to the biology of the Class Aves. Course learning outcomes include (1) understanding the proximate and ultimate patterns and causes of biological diversity, form, and function in birds, (2) identification of Illinois avifauna, and (3) evaluating and synthesizing avian data and literature in a scientific report. This course also emphasizes student learning outcomes (SLOs) aligned with program outcomes (1) possess a significant knowledge base in Integrative Biology, including structure and function, ecology, genetics and heredity, evolution, molecular biology, and statistical inference, (3) show curiosity and caring about biology, and an awareness of and appreciation for the diversity of life, (10) read and synthesize primary scientific literature, and (11) critically evaluate science-related news and information.

Course Website: Materials for both the lecture and lab portions of this course will be posted on Canvas.

Textbooks and Materials

Lecture: There is no textbook required for the lecture portion of the course, but lectures largely follow Frank B. Gill and Richard O. Prum. 2019. *Ornithology* (4th edition). W. H. Freeman, New York, NY. ISBN: 978-1-4641-8436-9. A copy of this text will be placed on reserve at the Funk ACES Library.

Lab: Students will be required to purchase a field guide to the birds of North America. You may choose whichever guide you prefer, but we recommend the following: John L. Dunn and Jonathan Alderfer. 2017. *National Geographic Field Guide to the Birds of North America* (7th edition). National Geographic Society, Washington, D. C. **Other Materials:** Binoculars will be provided and can be checked out for field labs. However, students may also bring their own binoculars if they prefer.

Attendance and Assignment Policy

Students are expected to attend all lectures and labs. Lecture slides will be available on Canvas. We will also have in-class discussions, in-class and online quizzes, and in-class exams. There will be no make-ups for any exams, quizzes, or lab exercises other than for documented illnesses or other reasons approved beforehand by the course instructors. We expect students to submit assignments (described below) in a timely fashion. Late assignments are subject to a point penalty. You must attend the lab section that you signed up for (i.e., either Monday or Wednesday). Approval to attend the other lab section will be granted only in exceptional circumstances, in advance, and in consultation with the TA of your assigned section.

Required Reading

Though textbook reading is not required, the lecture schedule follows chapters of *Ornithology* (Gill and Prum 2019). Recommended chapter readings from *Ornithology* are provided on the attached schedule. We will also read select scientific journal articles in preparation for in-class discussions. These will be provided on Canvas prior to discussion sessions.

Required Lecture Assignments

- Quizzes (50 pts) There will be 5 lecture quizzes worth 10 pts each. Quizzes will be on Canvas in a multiple-choice/true-false format, open-book and at your own pace, and due by 11:59 pm on the assigned day.
- Paper Discussions (20 pts) We will discuss 2 scientific papers worth 10 pts each during lecture related to topics covered in the course. For full credit, you will be required to attend in person and submit 5 questions related to the paper via Canvas before the discussion date.
- Lecture Exams (300 pts) There will be 3 non-cumulative lecture exams worth 100 pts each. Questions will be drawn from lecture material and reading assignments. They will be a combination of multiple choice, definition, short answer, and essay. Exams will be given during lecture, on paper.
- Research Report (75 pts) You will work in pairs to write a research report that summarizes avian abundance data collected from natural areas. We will provide you with a data set, and you will come up with an objective or hypothesis to address using the data. The research report will include all sections of a scientific paper (abstract, introduction, methods, results, discussion, figures/tables, references), which includes comprehensively discussing the literature related to your research objective or hypothesis (minimum of 3 citations). Both the first and final draft will be submitted via Canvas.

Lab Information

Students are expected to attend all lab sessions. Unless you have an excused absence, missed labs cannot be made up. Lab handouts/worksheets will be available on Canvas prior to lab.

- **Field Labs:** We will spend several lab sessions birding and mist netting outdoors. Field labs may extend into lecture time. Bring binoculars (provided or your own) and a notebook (not provided) in which you can record field notes and keep a bird species list. Remember to dress appropriately for the weather. For each field lab, you will be required to record birds observed in a trip summary. See below for further details.
- **Bird Specimen Labs:** Much of the lab will be devoted to learning to identify ~150 of the bird species in Illinois by studying museum specimens and listening to vocalizations (songs/calls) of each species. See below for further details.

Required Lab Assignments

- Lab Quizzes (120 pts). You will have 6 weekly ID quizzes worth 20 points each covering specimen identification, anatomy, and songs/calls learned during lab sessions (Bird ID 101, Birds I-V). Quizzes will take place at the beginning of lab and will cover the previous week's material.
- Field Trip Summaries (90 pts). You will submit 6 summary reports worth 15 points each: 5 weekly summary reports for each lab field trip, and 1 report for an independent field trip you take on your own time. Submission will be via Canvas following a pre-made template. We will provide the template and additional information during the first lab.
- Field ID Quiz (30 pts). Our last field trip will be a field quiz with binoculars, where you will be required to identify bird species we encounter by sight and/or sound that we previously identified in the field or lab.

Laboratory Safety

Potentially hazardous reagents and materials are used or encountered in modern biology, which includes handling taxidermic mounts and specimens. The lab environment and tools are only hazardous when handled improperly. Ensure your personal safety by reading laboratory instructions carefully before class and following instructions in the lab.

- Keep coats, backpacks, and personal belongings off walkways and off bench tops.
- Always wear close-toed shoes in the lab.
- Do not store, prepare, or consume food or beverages in the lab.
- Keep drawers and cabinets closed when not in use.
- Please handle specimens with care, as they are fragile and irreplaceable. We will provide further instructions on how to safely handle specimens in the lab.
- Clean your lab bench after a lab exercise, including the floor if necessary.
- Wash your hands before leaving the lab.

Field Safety

Field trips involve visiting local parks and forest preserves and you will likely be outside for 1-2 hours. Field trips will still occur in light rain or snow, and on cold days. Please review the following instructions to ensure you are comfortable and safe in case of inclement weather changes:

- Bring water and snacks.
- If it is cold, bring a heavy jacket, hat and gloves. Wear layers that you can take on/off.
- If it is sunny, bring sunglasses and wear sunblock to protect exposed skin.
- Wear sturdy close-toed shoes/boots with water resistance.
- We recommend always wearing long pants, in case of ticks and biting insects.
- Consider wearing insect repellent on warmer days with high insect activity.
- Double-check the van for belongings before you exit.

Evaluation/Grading

Grades will be earned by accumulating points from the following:

Lecture Quizzes	50 pts (5 total, 10 pts each)
Lecture Exams	300 pts (3 total, 100 pts each)
Paper Discussion	20 pts (2 total, 10 pts each)
First Draft of Report	30 pts
Final Report	45 pts
Lab Quizzes	120 pts (5 total, 20 pts each)
Field ID Quiz	30 pts
Field Trip Summaries	90 pts (6 total, 15 pts each)
Total	685 pts

GRADING SYSTEM:

A+	97 to 100%
A	93 to 96.9
A-	90 to 92.9
B+	87 to 89.9
B	83 to 86.9
B-	80 to 82.9
C+	77 to 79.9
C	73 to 76.9
C-	70 to 72.9
D+	67 to 69.9
D	63 to 66.9
D-	60 to 62.9
F	< 59.9

<u>Date</u>	<u>Lecture Subject</u>	<u>Lab</u>
Jan. 21	Introduction (All)	No Lab
23	Origin & Evolution of Birds (Stodola)	
26	Origin & Evolution of Birds (Stodola)	Bird ID 101
28	Phylogenetics & Systematics (Stodola)	
30	Phylogenetics & Systematics (Stodola) ** Lecture Quiz **	
Feb. 2	Feathers & Flight (Benson)	Birds I
4	Feathers & Flight (Benson)	
6	Physiology (Benson)	
9	Research Report Introduction **Lecture Quiz **	Birds II
11	Brains, Intelligence, & Senses (Enos)	
13	Brains, Intelligence & Senses (Enos)	
16	Vocalizations (Enos)	Birds III
18	Vocalizations (Enos)	
20	** Paper Discussion I **	
23	EXAM I	
25	Annual Cycles (Enos)	Birds IV
27	Migration & Navigation (Enos)	
March 2	Migration & Navigation (Enos)	
4	Social Behavior (Enos)	Birds V
6	Social Behavior (Enos)	
9	Data Management: Group W (Enos) ** Lecture Quiz **	
11	Data Management: Group M (Enos)	Field Trip
13	Conservation Behavior (Enos)	
14-22	Spring Break	
23	Breeding Systems (Benson)	
25	Breeding Systems (Benson)	Mistnetting
27	Avian Reproduction (Benson)	
30	Nests & Incubation (Benson)	
April 1	Nests & Incubation (Benson)	Field Trip
3	Parents & Offspring (Benson) **Lecture Quiz **	
6	Brood Parasitism (Guest Lecture: Mac Chamberlain)	
8	** Paper Discussion II **	Field Trip
10	EXAM II	
13	No Lecture (extended lab)	
15	No Lecture (extended lab)	Field Trip
17	Life History (Stodola) ** Report First Draft Due **	
20	Life History (Stodola)	
22	Populations (Stodola)	Field Trip
24	Populations (Stodola)	
27	Speciation (Stodola)	
29	Communities (Stodola)	**Field ID Quiz**
May 1	Climate Change & Birds (Enos) ** Lecture Quiz **	
4	Local Conservation (Guest Lecture: Dr. Mike Ward)	No Lab
6	Careers and Grad School (Enos+) ** Final Report Due **	
May 14th	FINAL EXAM (8:00-11:00 AM)	

University Policies

Academic Integrity

The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: <https://studentcode.illinois.edu/>.

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructors if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Students with Disabilities

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the TA as soon as possible. To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should contact Disability Resources and Educational Services (DRES) and see the instructor as soon as possible. If you need accommodation for any sort of disability, please speak to the instructors after class, or make an appointment to discuss. DRES provides students with academic accommodation, access, and support services. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail disability@illinois.edu. <https://dres.illinois.edu/>.

Family Educational Rights and Privacy Act (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <http://registrar.illinois.edu/ferpa> for more information on FERPA.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution for disciplinary action.

Religious Observances

The Religious Observance Accommodation Request form is available online at <https://oae.illinois.edu/religious-accommodations/>.

Submit the form to the instructor and to the Office of the Dean of Students (helpdean@illinois.edu) by the end of the second week of the course; in the case of exams or assignments scheduled after this period, students should submit the form to the instructor and to the Office of the Dean of Students as soon as possible.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential.

Other information about resources and reporting is available here: wecare.illinois.edu.

Diversity and Decency

The course instructors support the College of Liberal Arts & Sciences diversity statement "...providing a healthy, safe, and secure space for analytical and critical thinking, teaching, research, and innovation..." (<https://las.illinois.edu/about/diversity/statement>). The effectiveness of this course is dependent upon the creation of an encouraging and safe classroom environment. Exclusionary, offensive or harmful speech (such as racism, sexism, homophobia, transphobia) will not be tolerated and in some cases is subject to the University harassment procedures.

Here are a few additional resources that might be of interest. If you go by a name that is different from your legal name, you can now provide your chosen name to the University. The chosen name will automatically appear in the University systems. To set or change your chosen name, using campus portal or other resources, enter Banner Student Self-Service and under Personal Information options, select Preferred First Name. Follow prompts. https://www.uillinois.edu/about/policies/preferred_first_name_statement

If you prefer to use single-stall restrooms, the following link is a list of where these restrooms are available on campus. Single stall restrooms are often labeled Family Restrooms, All-Gender Restrooms, or Unisex restrooms: <https://fs.illinois.edu/all-gender-restrooms/>

Students have access to the Counseling Center, located in room 206 in the Student Services Building (610 East John Street, Champaign). Hours of operation: 8 am to 5 pm. The Counseling Center is committed to providing a broad range of high quality, innovative, and ethical services that address the psychological, educational, social, and developmental needs of University of Illinois students. <https://counselingcenter.illinois.edu/>

Emergency Response Recommendations

Emergency response recommendations can be found at the following website: <https://police.illinois.edu/em/mitigation/emergency-action-plans/>

I encourage you to review this website and the campus building floor plans website within the first 10 days of class. Information on how to respond to an emergency (run-hide-fight) can be found here:

<https://police.illinois.edu/community-outreach/run-hide-fight/>