BIOL-3261 FALL 2021

Ornithology

Department of Integrative Biology University of Windsor



Updated Sept. 3, 2021

Tuesday/Thursday | 10:00 – 11:20 AM EST | Online Instructor: Dr. Christine Madliger | GAs: Rachel Pieniazek & Erika Nissen

Our course within the context of the Covid-19 pandemic

This course has been redesigned to fit an entirely online format. While we would normally be getting outside as a group to experience local birdlife, you will still gain skills in bird identification. Following independent birding walks, there will be opportunities for us to work collaboratively as a class to verify species identification and share interesting observations.

Lectures (slides and video recordings), announcements, information regarding assignments, and all other materials will be posted to/linked from Blackboard.

Attendance is not enforced in this class, but participation in all components of the course is encouraged for you to excel.

As we all navigate this learning environment together, please show patience and compassion. The instructor and GAs pleage to do the same for all students.

Instructor Information

Professor: Dr. Christine Madliger

Call me: Dr./Prof. Madliger or Dr./Prof. M [pronouns: she/her]

Email: madliger@uwindsor.ca

Virtual office hours via Teams: Thursdays 11:30 – 1:00

Questions about course material and grades will only be discussed during office hours or virtual meetings, not over email.

GA: Rachel Pieniazek (pieniaz@uwindsor.ca) [she/her]
GA: Erika Nissen (nissen@uwindsor.ca) [she/her]
Virtual GA office hours (Blackboard): To be announced

Course Synopsis

This third-year course in Ornithology will provide students with a thorough understanding of the biology of birds, with an emphasis on avian behaviour, ecology, and evolution. Topics include the origin and evolution of birds; taxonomy; flight and feathers; long-distance migration; reproduction; behaviour and communication; cognition and neuroanatomy; and the conservation of birds. Lectures are integrated with laboratory exercises that provide students with opportunities to critically assess these topics, build teamworking skills, and improve science literacy and communication. Through outdoor exercises, students will also become familiar with some common birds of southern Ontario.



Learning Objectives: what can you gain from this course?

- Acquire an understanding of the evolution, anatomy, reproduction, migration, behaviour, and communication of birds
- Gain knowledge of the conservation status of the world's birds, the threats facing their populations, and the conservation strategies being used to slow or reverse declines
- Employ problem-solving as a group to develop local conservation strategies for birds and present them in oral and visual formats
- Develop identification skills (using both sight and sound) for local bird species
- Improve your ability to critically assess and summarize scientific research

Assessment: how will success be measured?

50%	Exams
20%	Group Assignment
20%	Lab Quizzes & Activities
10%	Independent Birding



Recommended & Required Texts

1. Ornithology by Frank Gill and Richard Prum (2019, Freeman, 4th Edition)

Completing the readings in this textbook will help you excel in this course. Because of the high cost, I make this book <u>recommended</u> instead of required. If desired, the book can be purchased here:

https://store.macmillanlearning.com/ca/product/Ornithology/p/1464184364?searchText=ornithology.
I also place 2 copies of the book on reserve in the library.

2. The Sibley Field Guide to Birds of Eastern North America, 2nd Edition

Having a field guide to the birds of North America or <u>eastern</u> North America is a <u>required</u> text because it is extremely helpful for identifying birds in the field. I recommend the Sibley Guide (\$25 on amazon.ca or at Chapter's, and available in the campus bookstore). Further advice about choosing a field guide can be found on Blackboard.

Other Course Information

Lectures: Online synchronous on Teams; links to videos of lectures will be posted on Blackboard

Course content: Available on Blackboard

Online laboratories (Blackboard):

Mondays (section 51), Tuesdays (section 52); 2:30 – 5:30 PM

Midterm exam date: October 28, 2021 (online during class)

Final exam date: Scheduled by the Registrar (usually announced in October)

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Final drop date for this course: December 6, 2021

Prerequisite: BIOL-2101 (Ecology)

Course Assessments and Activities

- 1. Midterm Exam (20%): The midterm exam will be comprised of a mixture of multiple choice and short answer questions. It will cover the material discussed in lectures 1-9 ('The Diversity of Birds' through 'Vocalizations').
- **2. Final Exam (30%):** The final exam will be comprised of a mixture of multiple choice, short answer, and long answer questions. It is <u>non-cumulative</u> and will cover lectures 10-21 ('Annual Cycles' through 'Conservation Solutions').
- 3. Group Assignment (20%): Working in groups of 3, you will complete a semester-long project aimed at designing a conservation solution for birds in our local area. You will first participate in a discussion of a scientific paper illustrating that North American birds have been experiencing staggering population declines. You will then choose one of the '7 simple actions to help birds' (from the '3 billion birds lost' movement), research the threats this action could address, and create a plan to put this conservation strategy into action at the University of Windsor or the surrounding region. You will produce a written conservation plan with background information from the scientific literature (10%), an infographic (5%), and a 4-5 minute oral presentation (3%). The remaining components of your course mark will be based on a group contract/agreement (1%) and a 0.5 page project proposal (1%). More details will be presented during lab sessions.
- **4. In-lab Bird Identification Quizzes (15%):** To gain identification skills of local birds, you will be completing 3 quizzes during lab time, each worth 5% of your final course grade. You will identify species (common name) based on a photograph, a sound, or both a photo and a sound.
- 5. Independent Birding Checklists and Reflections (13%): You will be responsible for embarking on three independent birding 'sessions' that are each at least one hour in length, spaced across the semester to highlight how species observations change with the seasons. Based on your observations, you will create 'checklists' that describe the species you encountered. These will be submitted to eBird (details will be discussed in the first lab session). You will be introduced to the basics of bird identification and helpful resources in the first lab session. One week prior to the due date for each checklist, you will have the opportunity to share and discuss your sightings during your lab session and draw on the expertise of your colleagues and GAs for assistance with identification. One week prior to submitting your checklist, you will submit a reflection of your birding outing that outlines: 1 example of a success/skill you gained; 1 struggle you experienced; and 1 goal you have for improving your skills for the next session. Each checklist will be worth 3.33% of your final course grade; each reflection is worth 1% of your final grade. We will provide alternative accommodations for students who are unable to go birding; please contact the instructor if this applies to you.
- **6. Discussion Participation (2%):** This component of the course mark will come from attending and participating in two lab discussions. This includes coming prepared (e.g., reading discussion articles in advance) and offering your knowledge or opinion during discussions (on semester weeks 2, and 7 see detailed schedule below). Each will be worth 1% of the final course mark.



I understand the difficulty that pandemic-related anxiety and stress can cause for learning and productivity. If you **miss a laboratory exercise**, **quiz**, **or exam**, there is <u>no</u> documentation required. Please read my <u>full policy</u> on missed work and exams below.

Lecture Schedule

Week	Dates	Concepts	
1	Sept 9	The Diversity of Birds (Chapter 1)	
2	Sept 14 & Sept 16	Evolutionary Origin (2); Phylogeny and Systematics (3,19); Feathers (4)	
3	Sept 21 & Sept 23	Flight (5); Physiology (6)	
4	Sept 28 & Sept 30	Senses, Brains, Intelligence (7)	
5	Oct 5 & Oct 7	Visual Communication; Vocalizations (8)	
	Oct 12 & Oct 14	NO LECTURES - October 9-17 is Fall Reading Week	
6	Oct 19 & Oct 21	Annual Cycles (9); Migration & Navigation (10)	
7	Oct 26	Optional Midterm Review	
	Oct 28	In-class Midterm Exam - 10:00-11:20am	
8	Nov 2 & Nov 4	Social Behaviour (11); Bird Sex (12)	
9	Nov 9 & Nov 11	Sexual Selection (13); Breeding Systems (14)	
10	Nov 16 & Nov 18	Nests & Incubation (15); Parents and Offspring (16)	
11	Nov 23 & Nov 25	Populations (18); Communities (20)	
12	Nov 30 & Dec 2	Conservation Threats (21); Conservation Solutions (21)	
13	Dec 7	Optional Exam Review	
	December 11-21?	Final Exam (scheduled by Registrar)	

Lab Schedule and Assignment Due Dates

Week	Dates	Activity	Assignment Due
2 Sept 13,	Cart 12/14	Part 1: Introduction to the GAs, quizzes, assignments, lab structure	
	Sept 13/14	Part 2: Introduction to birdwatching, identification, making checklists	
3 Sept 20/	Sept 20/21	Part 1: Discussion of "The Decline of the North American Avifauna"	
3	Sept 20/21	Part 2: Overview of group project details, group assignments, contract	
4 Se	Cont 27/20	Part 1: Bird ID Quiz #1	Group contract
	Sept 27/28	Part 2: Collaborative ID session	
5 Oc		No labs (time for independent birding)	1) Checklist #1
	Oct 4/F		2) Outline due *by
	Oct 4/5		October 8 at 5:00 PM
			EST*
	Oct 11/12	NO LABS – October 9-17 is Fall Reading Week	
6	Oct 18/19	No labs (time for independent birding)	
7 0	Oct 25/26	Part 1: Collaborative ID session	
/	/ 001 25/26	Part 2: Discussion of "The Impact of Free-ranging Domestic Cats"	
8	Nov 1/2	Part 1: Bird ID Quiz #2	Checklist #2
9	Nov 8/9	No labs (time for independent birding)	
10	Nov 15/16	Part 1: Collaborative ID session	
		Part 2: Group project check-in	
11	Nov 22/23	Bird ID Quiz #3	Checklist #3
12	Nov 29/30	Group project presentations	Conservation plan and
			infographic

Policy on Missed Assessments

Bird ID Quizzes: Students who miss one of the lab-based bird identification quizzes will have their final grades pro-rated based on their other completed evaluations. No make-up <u>quizzes</u> will be conducted in this course.

Exams: Students who miss the midterm or final exam will have the opportunity to write a make-up on a date and time set by the course instructor. Make-up examinations will occur within 1 week of the original assessment date.

Assignments: The due dates for this course have been chosen to best accomplish our learning objectives and allow for timely feedback. You are welcome to hand assignments in early. All assignments are due by 2:30 PM EST (at the beginning of your assigned lab time) on their due dates. Please note that I have extended the due date for the outlines for the group project to October 8 at 5:00 PM EST. Given ongoing uncertainty, I will not penalize any assignments that are handed in within 48 hours of their due date. Following this 2-day extension, assignments will receive a penalty of 10% every 24 hours. However, if there are extenuating circumstances, please contact the instructor to discuss the possibility of a further extension.



Course Expectation: Respect for Diversity

Students from all backgrounds should feel welcome and safe in this course. The diversity that students bring to the class will be viewed as a benefit and strength. My intention is that all materials and activities included in this course are respectful of all forms of diversity including gender identity, sexuality, age, socioeconomic status, ethnicity, race, culture, and ability. Please tell me: 1) your preferred name and/or set of pronouns; 2) if a religious holiday you observe conflicts with a course deliverable; 3) If anything has been said in class or lab that makes you feel uncomfortable; 4) if you require any accommodations.

Historically, much of the science of Ornithology has been built on a small subset of privileged voices. I acknowledge that there may be overt or covert biases in the materials (e.g., textbook) due to the lens in which it was written. I am optimistic that the world of Ornithology, and the sciences in general, are currently being strengthened by a more diverse set of experiences and voices (e.g.,

https://www.allaboutbirds.org/the-forgotten-female-how-a-generation-of-women-scientists-changed-our-view-of-evolution/). Comments, questions, and/or suggestions for resources to be incorporated into future versions of this course are always welcome.

Other Expectations

Academic Integrity: Students in this course are expected to follow all university guidelines with respect to academic integrity. Plagiarism, copying, and all other forms of academic dishonesty will be reported and not tolerated. http://www.uwindsor.ca/academic-integrity/358/avoiding-plagiarism

Online Etiquette: You are expected to represent yourself honestly and to interact with the instructor, classmates, and GAs in a polite and professional manner. Use respectful language in discussions and in online chats, and use the "raise hand" tool. Any behaviour that is disruptive to other learners will not be tolerated. To maintain privacy, students are not required to have their cameras on at any time.

Copyright of Course Materials: Lectures and course materials are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. Course materials such as PowerPoint slides and lecture recordings are made available to you for your own study purposes. These materials cannot be shared outside of the class or "published" in any way. Posting recordings or slides to other websites without the permission of the instructor may constitute copyright infringement.

Resources

COVID Wellbeing Portal: The university has created a dedicated online space that focuses on managing aspects of wellbeing and mental health related to the COVID-19 pandemic. It can be accessed here: https://www.uwindsor.ca/coronavirus/377/wellbeing-portal.

Wellness Services: The University of Windsor Wellness Outreach Office offers a list of resources and services offered on campus and in the community for students. These include peer support, counseling, physical and mental health, academic, and other services. Find the full list here: https://www.uwindsor.ca/studentexperience/sites/uwindsor.ca.studentexperience/files/wellness resource sheet.pdf.

24 Hour Support is Available: My Student Support Program (MySSP) is an immediate and fully confidential 24/7 mental health support that can be accessed for free through chat, online, and telephone. This service is available to all University of Windsor students and offered in over 30 languages. Call: 1-844-451-9700, visit https://keepmesafe.myissp.com/ or download the My SSP app on the Apple App Store/Google Play.

Student Accessibility Services: Student Accessibility Services provides a variety of services and supports to students with documented disabilities (including: learning disabilities, attention deficit/hyperactivity disorder, acquired brain injuries, vision, hearing and mobility impairments, chronic medical conditions, and psychiatric issues). If you have, or think you may have a disability, you may wish to visit Student Accessibility Services to learn how best to meet your academic goals. Students with disabilities who require academic accommodations in this course must contact an Advisor in Student Accessibility Services (lower level of Dillon Hall, (519) 253-3000 ext. 6172 or online at http://www.uwindsor.ca/studentaccessibility/) to complete Student Accessibility Services Registration and receive the necessary Letters of Accommodation. After registering with Student Accessibility Services, you must present your Letter of Accommodation and discuss your needs with the instructor as early in the term as possible.

University Policy on Sexual Misconduct: https://www.uwindsor.ca/sexual-assault/ The University of Windsor values dignity, respect and equality for all individuals and strives to foster an atmosphere of healthy attitudes and behaviours towards sexuality, sex, and gender. The University is committed to maintaining a healthy and safe learning, living, social, recreational, and working environment. All forms of sexual misconduct (included, but not limited to: verbal harassment, non-consensual sexual contact; online harassment; non-consensual sharing of images, etc.) jeopardize the mental, physical and emotional welfare of our students and employees, as well as the safety of the campus community and the reputation of the University. Anyone who has experienced sexual misconduct deserves support. Regardless of whether the incident occurred recently or many years ago, you deserve support now. If you wish to speak confidentially about an incident of sexual misconduct, please contact the Sexual Misconduct Response and Prevention Office at svsupport@uwindsor.ca. Please note, you do not have to formally report your experience in order to receive support, resources, and guidance. If you would like to consider filing a formal complaint with the University, or have questions about policies and procedures regarding sexual misconduct, the Office can also provide this information and assist with the process.

Information Technology Services: You can find help and information from IT Services if you have technical problems: https://www.uwindsor.ca/itservices/support.

Land Acknowledgement: The University of Windsor sits on the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomie. I respect the longstanding relationships with First Nations people in this place in the 100-mile Windsor-Essex peninsula and the straits – les détroits – of Detroit.