Course Outline for Winter Semester 2024

Draft: Jan. 5 2024

Professor:	**Dr. Dan Mennill** (pronouns: he/him)
What to call me:	Please call me "Dan" (preferred) or "Dr. Mennill" or "Professor Mennill"
Office:	Biology Building Room 106 (mornings) and Essex Hall Room 236 (afternoons)
Telephone:	519-253-3000 ext. 4726
E-mail:	All course-related correspondence must be done during office hours, through Brightspace messages, or, in the case of emergencies, by telephone. I cannot interact with you effectively by email.
Office hours:	Mondays from 13:00 to 14:00 in Essex Hall Room 236
Lectures:	Mondays and Wednesdays, 11:30 to 12:50 in Biology Building Room 121
Laboratories:	Mondays (section 51) and Tuesdays (section 52), 14:30 to 17:20 in Biology Building Room 34
Midterm Exam:	Monday February 12, 11:30 to 12:50, in Biology Building Room 121
Final Exam:	Scheduled by the Registrar

Course webpage: Brightspace plus web2.uwindsor.ca/courses/biology/dmennill/360/360Home.html

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; avian taxonomy; avian flight and feathers; long-distance migration; avian reproductive anatomy, physiology, and reproductive strategies; avian behaviour and communication; avian cognition and neuroanatomy; and the conservation of birds. This course complements concepts learned in Ecology, Evolution, Physiology, Animal Behaviour, and Conservation. Classroom lectures are integrated with laboratory exercises which will provide students with hands-on exposure to the topics covered in lecture as well as the techniques used in the study of birds. Through outdoor laboratory exercises and an independent research project, students will become familiar with the common birds of southern Ontario. (Note: There is no full-day field trip in the winter 2024 course offering.)

Required Book: Students must have a field guide to the birds of North America or eastern North America. I recommend The Sibley Field Guide to Birds of Eastern North America, 2nd Edition ($32 on indigo.ca and amazon.ca). Any bird field guide that covers eastern North America will be satisfactory, as long as it is a physical book. You must bring this to the first lab.

Recommended Book: Course textbook: Ornithology by Frank Gill (2007, Freeman, 3rd Edition). **You will need to read most of this textbook to excel in this course.** Because of the high cost, I make this book *recommended* instead of required. Two copies can be placed on reserve in the library; if you are interested in this, please speak to Dr. Mennill. Because this is a slightly older text, you may find it online.

Evaluation:

Midterm exam (multiple choice and short answer):	30%
Final exam (multiple choice and short answer):	30%
Lab-based bird identification quizzes (3 in total, each worth 6.66%):	20%
Participation in indoor and outdoor laboratories:	5%
Lab-based Independent Project (details to be provided in lab):	15 %

Inclusivity statement: I am committed to creating an academic environment that prioritizes equity, diversity, and inclusivity. **Everyone is welcome in our classroom, regardless of gender, gender-identity, sexuality, ethnicity, religion, culture, and national origins.** We are better learners when we recognize and respect diverse perspectives, and when everyone in our class knows that their contribution is welcome and valuable. Please let me know how I can help to support you during this class, and I will do my best to do so.

Land acknowledgement: Our university sits on traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomie. As an ornithologist and as your professor for this course, I respect and acknowledge the long relationship between First Nations people in this place.

Note about sickness and the pandemic: We continue to live through a challenging pandemic, and we must all use our intelligence to keep ourselves healthy and protect the health of people around us. **If you are sick or starting to feel sick, please do not come to class!** I will record video and audio of all lectures and post them to YouTube as soon as possible when the lecture is complete (hopefully within an hour or two). This way, you can avoid coming into our classroom and making others sick.

Doctor's notes: If you are sick and you miss a graded component of the course, do not panic! When you become healthy again, please send me and your GAs an email to tell us that you missed a graded component due to illness. I do not require a doctor's note; I trust you. I will pro-rate your grade as explained below.

Pro-rating grades: Students who miss one of the exams or one of the lab-based bird identification quizzes will have their final grade pro-rated on the basis of their completed evaluations. For all students 20% of their grade will come from the bird identification quizzes; 20% from the other lab-based components of the course (participation and independent project); and 60% from the exams… I will pro-rate grades to meet these ratios. If for some reason you are sick during both the mid-term and final exam, I will come up with an alternative way to test you on this material.

Academic integrity: Students of 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 in any form.

Outdoor laboratories: Several of the laboratories take place outdoors (see schedule, below, for dates). These labs will occur **rain or shine** and will involve walking around and studying wild birds. For outdoor labs, students are required to bring their field guide and wear appropriate attire for hiking/birdwatching. Students are encouraged to bring their own binoculars to outdoor laboratories. For students who do not own binoculars, there are university-owned binoculars available.

Checklist of items that you must bring to the lab to receive full participation marks:

(1.) Your bird field guide
(2.) Appropriate attire
(3.) Binoculars OR your student card to leave with the GAs to borrow binoculars

Binoculars: If you own binoculars, bring them with you on the labs for this course. The GA's and I will be excited to help you learn to use your binoculars. Students will be allowed to use university-owned binoculars but they will be required to leave their student card with the GAs each time they sign out a pair of binoculars.

Independent projects: Each student is required to write up an independent project that will be explained in the laboratory sessions. These projects must be written entirely independently.

Learning outcomes: By the end of the course, the successful student will know and be able to:

- Describe core concepts in ornithology, including concepts of anatomy, evolution, reproduction, migration, and behaviour of birds.
- Communicate concepts about the biology of birds to others.
- Communicate ideas about birds in creative ways for both scientific audiences and the general public.
- Gather data on the biology of birds, organize those data, and communicate patterns in those data to others.
- Recognize and evaluate examples of human impact on birds, and the importance of birds for human well-being and the well-being of the natural world.
- Describe the role of research teams and citizen scientists in studying the biology of birds, including the interplay of individual and team-based ornithological studies.
- Recognize the 100 most common birds of the Windsor region by sight and sound.
- Recognize the impact of the names of birds, including eponymous names, and how this affects public involvement in ornithology.
- Reflect on the various ways and locations in which birdwatching can be undertaken, and the value of birdwatching as a pastime.

Weekly Schedule:

	Monday	Tuesday	Wednesday	Thursday	Friday
11:20 – 12:30	**Monday Lecture: Concepts** **Birder Break** **Birds of the World**		**Wednesday Lecture: Concepts** **Beak Break** **Concepts**		
13:00-14:00	**Dan's Office Hours (Essex 236)**		**GA Office Hours (Biology 106)**		
13:30-17:30	**Lab Section 51**	**Lab Section 52**			

Lecture Schedule (all lectures in Biology Room 121):

Week	Dates	**Concepts** [chapter number in Gill textbook]	**Birds of the World**
1	Jan 8 & Jan 10	Intro [1]; Origin of birds [2]; Systematics [3,19]	*Struthioniformes, Rheiformes, Apterygiformes, Casuariiformes, Tinamiformes*
2	Jan 15 & Jan 17	Feathers [4]; Flight [5]; Physiology I [6]	*Galliformes, Anseriformes*
3	Jan 22 & Jan 24	Physiology II [6]; Senses, Brains, and Intelligence [7]	*Caprimulgiformes, Apodiformes, Musophagiformes, Otidiformes, Cuculiformes*
4	Jan 29 & Jan 31	Visual Communication [7]; Vocal Communication I [8]	*Mesitornithiformes, Pterocliformes, Columbiformes, Gruiformes,*
5	Feb 5 & Feb 7	Vocal Communication II [8]; Annual Cycles [9]	*Podicipediformes, Phenicopteriformes, Charadriformes*
6	Feb 12	**In-class Mid-term Exam on Feb 12** **11:30-12:50** (location to be announced)	
	Feb 14	Migration [10]	
	Feb 19 & Feb 21	Feb 19-23 is Reading Week	
7	Feb 26 & Feb 28	Navigation [10], Social Behaviour [11]	*Eurypygiformes, Phaethontiformes, Gaviiformes, Sphenisciformes, Procellariformes, Ciconiiformes, Suliformes, Pelecaniformes*
8	Mar 4 & Mar 6	Mates [12], Breeding Systems [13]	*Opisthocomiformes, Accipitriformes, Strigiformes,*
9	Mar 11 & Mar 13	Bird Sex [14], Nests and Incubation [15]	*Coliiformes, Leptosomiformes, Trogoniformes, Bucerotiformes, Coraciiformes, Piciformes*
10	Mar 18 & Mar 20	Parents and offspring [16]; Populations [18]	*Cariamiformes, Falconiformes, Psittaciformes*
11	Mar 25 & Mar 27	Communities [20]; Conservation [21]	*Passeriformes* 1
12	Apr 1 & Apr 3	Conservation [21]	*Passeriformes* 2
	April	**Final exam** (scheduled by registrar)	

Lab Schedule (All labs start in Biology Building at 2:30 sharp):

Week	Dates	Activity
1	Jan 8-9	No labs (labs begin Jan 22/23)
2	Jan 15-16	No labs (labs begin Jan 22/23)
3	Jan 22-23	Part 1: Introduction: assignments, bird ID, binoculars, field guides, bird lists, birding Part 2: Birding on campus and along Detroit River – **Outdoors: rain or shine**
4	Jan 29-30	Birding at Ojibway Prairie Conservation Preserve – **Outdoors: rain or shine**
5	Feb 5-6	Part 1: **Bird ID quiz #1** Part 2: Discussion of independent projects
6	Feb 12-13	No labs (midterm week)
	Feb 19-20	Reading Week
8	Feb 26-27	Part 1: **Bird ID quiz #2** Part 2: Further discussion of independent projects
7	Mar 4-5	Feather forensics laboratory
9	Mar 11-12	Bird anatomy laboratory
10	Mar 18-19	Presentation of independent projects
11	Mar 25-26	**Bird ID quiz #3**
12	April 1-2	Birding in Ojibway Nature Reserve (**Outdoors: rain or shine**)