

**Ornithology (03-55-360) - Fall Term 2012****Course Outline**

<b>Professor:</b>	Dr. Daniel Mennill
<b>Office:</b>	Biology Building Room 106
<b>Telephone:</b>	519-253-3000 ext. 4726
<b>E-mail:</b>	All course-related correspondence must be done during office hours or, in the case of emergencies, by telephone; I cannot interact with you effectively by email.
<b>Office hours:</b>	Thursdays from 11:20 until 13:00 (immediately after Thursday class)
<b>Lectures:</b>	Tuesdays and Thursdays, 10:00 to 11:20
<b>Lecture Room:</b>	Biology Building Room 113
<b>Laboratories:</b>	Mondays (section 51), Tuesdays (section 53), Wednesdays (section 52), 14:30 to 17:20, Lab sections are scheduled by the registrar not by Dr. Mennill
<b>Laboratory Room:</b>	Mondays & Wednesdays (section 51 and 52): Biology Building Room 34 Tuesdays (section 53): Biology Building Room 29
<b>Saturday Field Trip:</b>	Saturday, September 29 (depart Biology Building at 6:00 AM sharp, return by 5:00 PM; attendance on this field trip is mandatory for you to pass this course)
<b>Midterm Exam:</b>	Thursday October 18 in class, 10:00-11:20
<b>Final Exam:</b>	Scheduled by the registrar (currently scheduled for Sat Dec 15 at 12:00)
<b>Course webpage:</b>	<a href="http://web2.uwindsor.ca/courses/biology/dmennill/360/360Home.html">http://web2.uwindsor.ca/courses/biology/dmennill/360/360Home.html</a> (or, go to <a href="http://www.uwindsor.ca/dmennill">www.uwindsor.ca/dmennill</a> and click on "teaching")

**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 many of 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. All students must participate in a full-day outdoor laboratory exercise at Point Pelee and Holiday Beach.

**Prerequisites:**

55-140 (Biological Diversity) and 55-210 (Ecology)

**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 (approx. \$20). The course webpage offers valuable advice about field guides including four recommended field guides.

**Very Highly Recommended Textbook:**

Course textbook: Ornithology by Frank Gill (2007, Freeman, 3<sup>rd</sup> Edition)

NOTE: This is the newest edition of Gill's textbook – the one with the black cover. **You will need to read most of this textbook to excel in this course.** Due to the challenging economic times, this book is highly recommended (instead of required) for this year's course. A copy can be placed on reserve in the library; if you are interested in this, please speak to Dr. Mennill.

**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%
Independent project 1 (1 page abstract; details in lab):	7.5%
Independent project 2 (1 page press release; details in lab):	7.5%

**Notes about grades:**

Students who miss the mid-term exam or one of the lab-based bird identification quizzes for documented medical reasons (a doctor's note is required in *all* cases) will have their final grades pro-rated on the basis of their completed evaluations. No make-up evaluations will be conducted in this course.

The one-page independent projects are due by 10:00 AM sharp (at the beginning of class) on the due dates. You can hand assignments in any time before 10:00 AM on the due date. But reports received at 10:01 AM will be considered late. Late reports will receive a penalty of 10% for every 24 hours that they are late (e.g. an assignment received at 10:01 AM the day following the due date will receive a penalty of 20%).

**Note about sickness:**

If you are sick or starting to feel sick, please stay home to look after your health and avoid passing your sickness to others. When you are healthy, come to see the GAs or Dr. Mennill and they will help you get caught up. If you are sick during a test or other evaluation, you must have a doctor's note.

**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.

**Saturday field trip:**

There will be a **mandatory** field trip to Point Pelee and Holiday Beach on **Saturday September 29. Participation in the Saturday field trip is mandatory (i.e. you must attend this field trip if you wish to pass this course).** The trip will occur **rain or shine.** We will meet on Sunset Ave next to the Biology Building Parking Lot on the University of Windsor campus at 5:50 AM and the busses will pull away at 6:00 AM. We will return to campus by 5:00 PM. Students are required to bring a lunch and their field guide and wear appropriate clothes for hiking and birdwatching. Students are strongly encouraged to find their own binoculars for the Saturday field trip, because university-owned binoculars are limited to one lab set.

**Outdoor laboratories:**

Many 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 strongly encouraged to bring their own binoculars to all 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 a University Promise Card(s) totalling \$30 from Cashier's Office

**Recommended equipment:**

Students are encouraged to have their own binoculars, but some university-owned binoculars will be available for student use. The course webpage and Dr. Mennill will offer advice about purchasing binoculars.

**University-owned binoculars:**

Students will be allowed to use university-owned binoculars but they will be required to deposit a University Promise Card(s) for a total amount of \$30 each time they sign out a binocular.

**Independent projects:**

Each student is required to write up two one-page independent projects during the course of the fall term. Projects will be explained in detail in the laboratory. These projects must be written entirely independently.

**Weekly Schedule (each week follows this format):**

	Monday	Tuesday	Wednesday	Thursday	Friday
10:00-11:20		<b>Concepts</b> <b>Beak Break</b> <b>Concepts</b>		<b>Concepts</b> <b>Birder Break</b> <b>Birds of the World</b>	
11:20		G.A. Office Hours		Dr. Mennill Office Hours	
2:30-5:30	<b>Lab Section 51</b>	<b>Lab Section 53</b>	<b>Lab Section 52</b>		

**Lecture Schedule:**

Week	Dates	Concepts (with chapter number in Gill textbook)	Birds of the World
1	Sept 6	The diversity of birds (Chapter 1)	<i>Tinamiformes</i> <i>Struthioniformes</i>
2	Sept 11 & Sept 13	The origin of birds (2); Systematics (3,19); Feathers (4)	<i>Galliformes</i> <i>Anseriformes</i>
3	Sept 18 & Sept 20	Flight (5); Physiology (6)	<i>Sphenisciformes</i> <i>Gaviiformes</i> <i>Procellariiformes</i> <i>Podicipediformes</i>
4	Sept 25 & Sept 27	Senses, Brains, & Intelligence (7)	<i>Phoenicopteriformes</i> <i>Ciconiiformes</i> <i>Pelecaniformes</i>
5	Oct 2 & Oct 4	Visual Communication (7), Vocalizations (8)	<i>Falconiformes</i> <i>Gruiformes</i> <i>Charadriiformes</i>
6	Oct 9 & Oct 11	Annual Cycles (9) & Migration (10)	<i>Columbiformes</i> <i>Psittaciformes</i>
	Oct 11	<b>Independent project #1 (abstract) due in class before 10:00 am sharp</b>	
7	Oct 16	Navigation (10)	
	Oct 18	<b>In-class Mid-term Exam during class 10:00 – 11:20 am (location to be announced)</b>	
8	Oct 23 & Oct 25	Social behaviour (11), Mates (12)	<i>Opisthocomiformes</i> <i>Musophagiformes</i> <i>Cuculiformes</i> <i>Strigiformes</i>
9	Oct 30 & Nov 1	Mates, Breeding Systems (12,13)	<i>Caprimulgiformes</i> <i>Apodiformes</i> <i>Coliiformes</i>
10	Nov 6 & Nov 8	Bird Sex (14), Nests & Incubation (15)	<i>Trogoniformes</i> <i>Coraciiformes</i> <i>Piciformes</i>
	Nov 8	<b>Independent project #2 (press release) due in class before 10:00 am sharp</b>	
11	Nov 13 & Nov 15	Parents and offspring (16); Populations (18)	<i>Passeriformes</i> 1
12	Nov 20 & Nov 22	Communities (20); Conservation (21)	<i>Passeriformes</i> 2
13	Nov 27 & Nov 29	Conservation (21)	
	Dec 15 at 12:00 noon ?	<b>Final exam (scheduled by registrar)</b>	

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

Week	Dates	Activity
2	Sept 10-12	Part 1: Introduction to bird ID, binoculars, field guides, bird lists, birdwatching Part 2: Birding on campus and along Detroit River – <b>Outdoors: rain or shine</b>
3	Sept 17-19	Part 1: <b>Bird ID quiz #1</b> Part 2: Bird capture and handling techniques – <b>Outdoors: rain or shine</b>
4	Sept 24-26	Birding at Ojibway Prairie Conservation Preserve – <b>Outdoors: rain or shine</b>
	<b>Sat. Sept 29</b>	<b>Saturday field trip – meet at Biology building 5:50 AM – Outdoors: rain or shine</b>
5	Oct 1-3	Discussion of a scientific paper; Independent project #1: Abstract writing
6	Oct 8-10	No labs (to make up for trip to Pelee and Holiday Beach)
7	Oct 15-17	No labs (to make up for trip to Pelee and Holiday Beach)
8	Oct 22-24	No labs (to make up for trip to Pelee and Holiday Beach)
9	Oct 29-31	Part 1: <b>Bird ID quiz #2</b> Part 2: Discussion of a scientific paper; Independent project #2: Press release
10	Nov 5-7	Feather forensic laboratory
11	Nov 12-14	Museum skin laboratory
12	Nov 19-21	Part 1: <b>Bird ID quiz #3</b>
13	Nov 26-31	Birding in Ojibway Nature Reserve ( <b>Outdoors: rain or shine</b> )

Watch course webpage for updates: <http://web2.uwindsor.ca/courses/biology/dmennill/360/360Home.html>