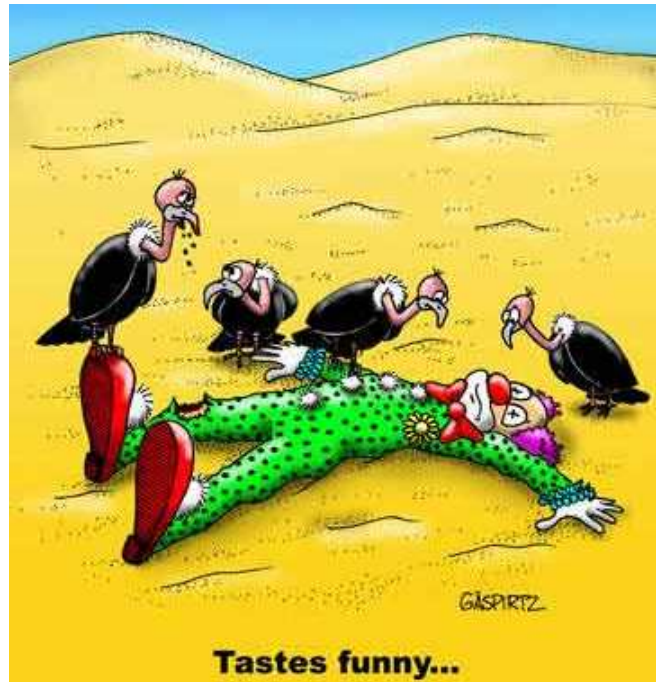


Instructors:

Dr. Shoshanah Jacobs
Office: SCIE 2447
Phone: x58096
Email: sjacob04@uoguelph.ca
Office hours: Mon and Tues, 13.00-14.00
Prefer an appointment? : just ask

Dr. Leslie Rye
Office: SCIE 2505
Phone: x56129
Email: lrye@uoguelph.ca



Lab schedule:

08.30-11.30: Thursday, SCIE 2313

*Note: there will be at one Saturday where your attendance is required.

Course Description

What is a bird? It is only when you try to answer this question that you will realise just how fascinating this group really is. You will learn that all of their adaptations have evolved in the context of flight and that, by studying the birds, we can gain valuable insight into the natural world of things that fly! This field and lab-based ornithology course will provide a practical introduction to the biology of birds. The lab material and exercises will expose students to unique aspects of avian form, function, and taxonomy. Students will also be exposed to a wide variety of avifauna through two field activities: one to Long Point Provincial Park to conduct field observations of North American migratory birds and the second to the Arboretum to practice handling and banding birds. Because this is a rather unique course with all sorts of activities to coordinate, all students are required to obtain instructor consent and sign an agreement to attend all scheduled activities in order to register for this course. Credit = 0.25. Prerequisites: 14 credits including ZOO*2090.

Learning outcomes:

At the end of the course each student should be able to:

- 1) Take relevant and detailed field notations of regional species that allow identification to species.
- 2) Appreciate and practice the handling of birds and specimens for scientific research purposes.
- 3) Effectively analyse, present, and interpret data.
- 4) Justify the importance of research and place it within a relevant scientific context.

- 5) Recognise and discuss the diversity of mechanisms that have evolved various traits (i.e. feathers, communication, feeding, mating).
- 6) Identify distinctions between avian anatomy and other vertebrates and use them to distinguish among species.
- 7) Infer the niche or aspects of natural history from morphological observations.

Resources

Textbooks:

Proctor, N.S. & Lynch, P.J. 1998. Manual of Ornithology: Avian Structure and Function. Yale University Press. (Available at bookstore).

ZOO*4920 – Lab Studies in Ornithology Course Manual.

Suggested Field Guides:

Sibley, D.A. 2001. The Sibley Guide to Birds. National Audubon Society. Knopf.

Peterson, V.M. and Peterson, R.T. 2002. A Field Guide to the Birds of Eastern and Central North America. Houghton Mifflin Co., Boston.

Other Resources:

Gill, F.B. 2007. Ornithology, Third Edition. W.H. Freeman and Company. New York. On reserve in library.

Avibase. <http://www.bsc-eoc.org/avibase/avibase.jsp>

Birdnet. <http://www.nmnh.si.edu/BIRDNET/>

<http://www.allaboutbirds.org/>

Very cool Books of Interest

Dingus, L. and Rowe, T. 1997. Mistaken Extinction: Dinosaur evolution and the origin of birds. ISBN 071672944X.

Weidensaul, S. 2000. Living on the wind: across the hemisphere with migratory birds ISBN 0865475911.

Course Content

Week		Date*	Topics / Activities		
1	SCIE 2304 2313	Sept. 4	Group 1: 2304 08.30-10.00: Introduction to field ornithology (ethical treatment of birds for scientific study and personal appreciation). Short lecture: <i>What is a bird?</i> 10.00-11.30: Lab 1 Exercise: Introduction to field identification Group 2: 2313 08.30-10.00: Lab 1 Exercise: Introduction to field identification 10.00-11.30: Introduction to field ornithology (ethical treatment of birds for scientific study and personal appreciation). Short lecture: <i>What is a bird?</i>		
****			Long Point	Sept. 6	Departure from the alley along the North side of the Science complex: 06.00 sharp. If you need binoculars: 05.45. Assignment 1 DUE by end of trip
2	Arboretum SCIE 2313	Sept. 11	Group 1A: Lab 2	Group 2ALL: Lab 3 Assignment 2 DUE by end of class	
3		Sept. 18	Group 1ALL: Lab 3 Assignment 2 DUE by end of class	Group 2A: Lab 2	
4		Sept. 25	Group 1B: Lab 2	Group 2ALL: Lab 4	
5		Oct. 2	Group 1ALL: Lab 4	Group 2B: Lab 2	
			Assignment 3 DUE by end of class		
6		Oct. 9	Group 1C: Lab 2	Group 2ALL: Lab 5	
7		Oct. 16	Group 1ALL: Lab 5	Group 2C: Lab 2	
8	2313	Oct. 23	Review lab (open from 08.30-11.30)		
9	2313	Oct. 30	Review lab (open from 08.30-11.30)		
10	2306	Nov. 6	10.00-11.30 – ALL : Lab 6 - Vocalisations		
11	2313	Nov. 13	Final exam		
12	-----	Nov. 20	Assignment 4 due by 11.30		

*Please note: due to the awesomeness of this course, and all the activities that we will be doing, the dates could shift around. Please monitor the newsfeed on the courselink site and check your email regularly.

Methods of Evaluation

Assignment 1: Field Notebook:

On our trip to Long Point, you are asked to keep a detailed field notebook for at least **five** of the species that you encounter. At the end of the field notebook observations, write down three research questions that came to you during our trip. On the drive back to the university, we will be mixing up the notebooks and you will be asked to try to identify the species of bird from the account given. If you think that you know the species, you will write it down on that account along with your name. You will be graded on whether you were able to identify the species if the account was clear, and the observer will be graded on whether they provided enough detail for a clear identification. **Make sure to write your name next to each identification that you attempt. See the lab manual for further detail regarding this assignment.**

Assignment 1: DUE Sept. 6 by the end of the trip.

Marking Rubric:

1) Distinguishing field marks	/5
2) Habitat	/3
3) Observed behaviour	/2
4) Relevant research questions	/3
4) Positive ID of your account	/1
5) Positive ID of other account	<u>/1 (if the account is insufficient, you will not lose this mark)</u>
	/15

Assignment 2: Dichotomous key

Working in teams of two students, prepare a dichotomous key for a tray of specimens that we will provide during lab time. Further instructions will be given during the lab.

Assignment 2: DUE by end of Lab 3.

Assignment 3: Reverse Journal Exercise

Using the graphs/figures provided, recreate the Materials and Methods and Results, including (made up) statistics. Make sure that you have accounted for all the information provided in the graph. Further details are provided in the lab manual.

Assignment 3: DUE Oct. 2 by the end of class.

Marking Rubric:

1) Materials and methods account for all aspects of data	/4
2) Results are logical and complement the data	/2
3) Statistical results agree with data and tests are appropriate	<u>/4</u>
	/10

Assignment 4:

Using the entire semester's data from the arboretum (posted on courselink), create a meaningful graph and complementary abstract. Further details are provided in the lab manual.

Assignment 4: Due November 20 by 11.30.

Marking Rubric:

1) Type of graph is appropriate for data presented	/4
2) Selection of data (dependent and independent) is interesting and meaningful	/4
3) Graph includes all relevant information (error bars, axes labelled etc..)	/5
4) Abstract describes a larger study	/2
5) Abstract includes a short intro, materials and methods, results, implications	<u>/5</u>
	/20

Late Penalty on Assignments

The assignments will have a late penalty of 10% per day. Thus, assignments that are **TEN (10) DAYS** late will receive 0%.

Absence and Illness

If you are absent from classes during the semester, you will be expected to make up for missed material on your own. If you do not complete assignments for medical or other authorized reasons, contact me asap to discuss.

Evaluation:

Assessment	Weight	Due Date	Course Content	Learning Outcome
Assignment 1	20%	September 6	Bird observations	1,6,7
Assignment 2	5%	End of lab 3	Dichotomous Key	6,7
Assignment 3	20%	October 2	Reverse Journal	3,4
Assignment 4	20%	November 20	Data presentation/abstract	2,3,4
Final Exam	35%	November 13	The whole shebang	5,6,7

Important Dates:

See the above schedule and evaluation tables.

Departmental policies, resources, rules:

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic

Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: <http://www.csd.uoguelph.ca/csd/>

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:
<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

E-mail Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly. E-mail is the official route of communication between the University and its students.

Drop Date

The last date to drop one-semester courses, without academic penalty, is the 40th class day, October 30, 2014. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar:
<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs:
<http://www.uoguelph.ca/registrar/calendars/index.cfm?index>

Campus Resources

If you are concerned about any aspect of your academic program:

- make an appointment with a program counsellor in your degree program.
<http://www.bsc.uoguelph.ca/index.shtml> or <https://www.uoguelph.ca/uaic/programcounsellors>

If you are struggling to succeed academically:

- There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist. <http://www.learningcommons.uoguelph.ca/>

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance. <https://www.uoguelph.ca/counselling/>
- Student Health Services is located on campus and is available to provide medical attention. <https://www.uoguelph.ca/studenthealthservices/clinic>
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations. <http://www.uoguelph.ca/~ksomers/>

If you have a documented disability or think you may have a disability:

- The Centre for Students with Disabilities (CSD) can provide services and support for students with a documented learning or physical disability. They can also provide information about how to be tested for a learning disability. For more information, including how to register with the centre please see: <https://www.uoguelph.ca/csd/>