Ornithology
Syllabus: BIOD48 Fall 2017

Course Instructors:	Dr. Rachel Sturge, rachel.sturge@utoronto.ca, SW 563B Office hours: Mon or Tues 11am to 12pm or by appointment **TA:** Erich Eberts (erich.eberts@mail.utoronto.ca)
Required Textbook:	F. Gill. *Ornithology* 3rd edition. Freeman Sibley. *The Sibley Field Guide to Birds of Eastern North America.* (available online and in bookstores)
Equipment:	10 pairs of binoculars will be provided to students (at least one per group of three). Students are encouraged to bring binoculars if they have them available.
Class meeting time:	Lectures Thursday 12:10 – 13:00 BV 361 Tutorials Friday 09:10 – 12:00 BV 498

1) Course Description

This class is a lecture and tutorial course that gives students an introduction to ornithology. There will be two main components: 1) lectures that cover avian ecology, evolution, taxonomy, physiology, behaviour, and conservation; 2) tutorials that will introduce students to the identification of birds in Ontario, point counts, behavioural studies, and song analysis. Regular field trips during tutorial will involve bird watching and field projects along the trails near UTSC and nearby sites in the Toronto area, participation in a census of migratory raptors along the Scarborough bluffs, observe mist netting techniques to capture and band birds, and a visit to the ornithology collections at the Royal Ontario Museum. The course aims to impart practical skills that may be useful for obtaining employment as a biologist.

2) Learning Outcomes

At the end of this course, students should be able to…

1. Correctly identify many of the common avian species in the Toronto area.
2. Apply some of the common bird census techniques.
3. Analyze bird vocalization using some of the popular software available, interpret their findings, and synthesize persuasive arguments about their results.
4. Discuss the origins and evolution of birds and identify their relationship to their closest living (reptiles) and nonliving (avian dinosaurs) relatives.
5. Describe the life history traits of many of the common avian taxonomic groups, including behaviour, communication, reproduction and parental care.
6. Explain approaches used in the conservation of at risk avian taxa.

3) Academic Honesty

All work in this course is covered by the University of Toronto's policies on Academic Misconduct (see below hyperlink), which outlines the behaviours that constitute academic dishonesty, as well as the processes for addressing academic offences. The University treats cases of cheating and plagiarism very seriously, so please **REVIEW THIS MATERIAL** as you are expected to be familiar with it.

http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf

Note that academic dishonesty includes (but is not limited to) failure to properly acknowledge other people's words, information or ideas (including information in textbooks), making up sources or facts, citing non-accredited sources (such as Wikipedia) as if they were peer-reviewed, submitting you own work in more than one course without the permission of both instructors, obtaining or providing unauthorized assistance on any assignment or test (including the use of unauthorized aids or looking at the answers of another student), misrepresenting your identify or falsifying / altering any documents required by the university (for example, a doctor's note), or putting your name on work that you did not contribute to.

All students should have confidence in their ability to master this course material and earn an acceptable grade. If you are struggling with the material, please come see me or speak with your Teaching Assistant. You should also consider forming study groups as research has shown that students who participate in study groups earn, on average, higher grades in courses than those who do not.

4) Course Policies

- Come to class on time and be ready to start as soon as class begins. Dress appropriately for the weather for tutorials that will take place outdoors.
- Read all material related to that day's lecture / tutorial BEFORE class, and complete any pre-class assignments in advance.
- Ask questions and discuss the material with other students. Group discussion promotes learning.
- Be an active learner and participate fully in all aspects of the course. Hold yourself and your teammates accountable for all tasks assigned to you / them in any group activity. Be honest with yourself if you are not contributing as fully as you should be, and make positive changes, if necessary.
- If using technology, which includes (but is not limited to) cellphones, tablets and computers, please use them responsible. The human mind is NOT capable of multitasking (as many scientific studies have shown), and distracted learners are not high-achieving learners. I reserve the right to dock points from any students caught using electronic devices for non-class activities, and also to ban them from future use of these devices while in class.

5) Assessment

a) Methods of instruction

The basic information of this course will be presented through lectures on major topics, and participation in tutorial activities. Class attendance (lecture and tutorial) is **mandatory** and prompt arrival is crucial. If you miss a tutorial due to a university-accepted reason, you are expected to find out what you missed by contacting other students in the class. You must also contact me within three days to make alternate arrangements for any assessment(s) you missed due to this absence.

b) Tutorials

Tutorials will comprise four elements: 1) learning to identify 145 of the most common species in the Toronto area, 2) observing wild birds while bird watching, mist netting, and during field trips to a migratory raptor monitoring site and a bird banding station, 3) a visit to the collections at the Royal Ontario Museum, 4) four tutorial assignments. Assignments will cover analyses of bird vocalizations, bird behaviour, and bird census methods.

Tutorials have a large outdoor field component. Outdoor activities include bird watching on campus, as well as several field trips off campus. Proper clothing appropriate to the season should be worn during all outdoor activities. Long pants and a light jacket should be ideal for activities during September and early October. Warmer clothing should be worn during late October and November. Only tennis or hiking style shoes (no sandals or dress shoes) should be worn, while winter boots should be worn during days with snow. To ensure safety, all students will work together in groups of three during outdoor activities. If two members of a group do not attend an outdoor activity, the remaining group member should contact the instructor or TA who will reassign them to another group for the duration of the activity. All students will need to sign a legal release form in order to participate in outdoor activities both on and off campus. Students with special needs or considerations (e.g. bee allergies, etc.) should contact the instructor personally.

Transportation to off-campus field trip destinations (all of which occur near Scarborough or the downtown Toronto region) will require using local public transit and/or carpooling with other classmates, and may require that students leave for the field site as early as 8am in order to arrive on time for class. Every effort will be made to return to campus by 12:00pm, but given local traffic conditions, this may not always be feasible.

Missed tutorials

If you miss tutorial due to a university-accepted reason (e.g. illness), please contact your instructor within three days and provide documentation to support your absence. We will then discuss alternate arrangements for any missed work that was completed in tutorial. Note that **no makeup identification quizzes** will be permitted (see 5c, below, for more details). For the policy on late assignments, please see 5d).

c) Identification Quizzes

Students will be responsible for learning to identify 145 of the most common birds of the Toronto area. Students will be presented with tips on identifying these birds during tutorial, and will be tested on this knowledge in quizzes that will take place at the start of tutorial. Each quiz will test students on birds covered during previous tutorial sessions. There will be ten species per quiz, eight of which will be from the previous tutorial session and two of which may be from earlier sessions, where applicable.

No makeup identification quizzes will be permitted. All students will be allowed to drop their lowest identification quiz score, regardless of the reasons for the missed quiz. Note this dropped score also includes all university-accepted excused absences (such as illness or religious holiday). If you will miss more than one quiz due to a university-accepted reason, you must contact your instructor as soon as possible so we can discuss alternate accommodations.

d) Tutorial Assignments

Tutorial assignments are worth 30% of your final grade. These assignments may include a written component that you will be expected to submit to turnitin.com (see section 6 of this syllabus for more details). You will be given more information about the assignments, including the relative worth of different assignments towards your final grade, as tutorials progress.

Late penalties

No late assignments will be accepted for work that is completed in tutorial (i.e. any worksheets completed in tutorial and handed in before you leave). For all other assignments, work that is turned in late will be penalized by 10% per day, **starting with 5 minutes after the due date / time**, unless the student provides documented proof of the reason for their tardiness. If you are unable to attend class on the day that an assignment is due, you are still expected to ensure that a digital copy of that assignment is submitted by the due date unless there is a valid reason why this was not possible. Assignments will be due at the start of class unless you are informed otherwise.

e) Tutorial Exam

There will be a final lab exam in tutorial that will test student knowledge on the identification of all 145 species learned in tutorial, as well as information covered in tutorial assignments, bird watching excursions and techniques (e.g. mist nesting details, etc.) and field trips. This will be held on the last day of tutorial in class.

f) Final Exam

The final exam (worth 35% of your final grade) will take place during the final exam period. It will focus on lecture and assigned readings. It will consist of multiple choice, short answer, case-studies and may include a few essay questions.

Makeup exams: If you miss the tutorial exam due to a university-accepted reason, please contact me within three days of the missed exam and provide me with documentation to support your absence (a valid doctor's note and a completed UTSC medical certificate confirming the illness and medical attention at the time of the missed assessment). Students who fail to contact me within three days will earn a score of zero and no makeup exam will be permitted (note that students who are unable to contact me within this time frame due to circumstances beyond their control are exempt from this, but must provide documentation to that effect). If you miss the final exam you must go through the registrar's office to request a deferred exam.

g) Accessibility

We welcome students with diverse learning styles and needs at this University and in this course. If you require some sort of accommodation, please see me or contact the AccessAbility Services Office (see below links) as soon as possible. We will work with you to ensure that you are able to meet the course learning objectives successfully. The UTSC AccessAbility Service staff are available by appointment to assess your specific needs, provide referrals, and to arrange appropriate accommodations. All enquiries are confidential.

UTSC AccessAbility: ability@utsc.utoronto.ca, (416) 287-7560, SW 302

h) Grading policies

Students are responsible for all material that is presented in lecture and tutorial. If you miss a class, you are strongly advised to obtain the notes and assignments from another student. Participation in lecture and tutorial will be an important factor in determining borderline grades, so attendance and participation are strongly advised. For more details, please refer to the relevant sections of this syllabus.

Category	Percent
Class participation (lecture and tutorial)	5%
Identification Quizzes (six, lowest will be dropped)	10%
Tutorial Assignments	30%
Tutorial Exam	20%
Final Exam (during final exam period)	35%

One week 'Statue of Limitations'

All grading questions about assignments, quizzes, etc. must be addressed within one week of the scores being posted online or handed out in class. After this time, no changes will be made to existing grades unless there is a calculation error. Thus, it is essential that you check your grades regularly and contact your TA or instructor within one week if you feel an error has been made or if you are unsure why you lost points.

6) Turnitin.com

We will be using Turnitin.com for this course. You are expected to submit a digital copy of any written assignments to Turnitin.com, and turn in a hard copy to be marked by your TA. The following statement is included for your information, as per University policy:

Normally, students will be required to submit their course essays to Turnitin.com for review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

You should have only one account for all of your University of Toronto coursework.

7) Lecture Schedule and Assigned Readings

Week	Date	Topic	Chapter
1	Sep. 7	The diversity of birds	1
2	Sep. 14	Feathers	4
3	Sep. 21	Mechanics of flight	5
4	Sep. 28	The Origins of birds	2, 3
5	Oct. 5	Migration and navigation	10
6	Oct. 12	**READING WEEK**	
7	Oct. 19	Behaviour and communication	7
8	Oct. 26	Vocalizations	8
9	Nov. 2	Sexual selection and breeding systems	12, 13
10	Nov. 9	Species and populations	18, 19
11	Nov. 16	Guest lecture: Avian conservation	21
12	Nov. 23	Reproduction	13, 15
13	Nov. 30	Parental care	26

8) Tutorial Schedule (subject to change based on weather conditions)

Week	Date	Location	Event Details	Identification Series	Quiz
1	Sep. 8	UTSC	Bird watching	Non-passerine land	
2	Sep. 15	UTSC	Intro to count surveys	Raptors, owls, nighthawks	1
3	Sep. 22	Offsite	Mist netting + CS	Passerines part 1	2
4	Sep. 29	Offsite	Tommy Thompson	-	-
5	Oct. 6	UTSC	Scarborough Bluffs	-	-
6	Oct. 13		**READING WEEK**		
7	Oct. 20	UTSC	Sound lab 1 + CS	Passerines part 2	3
8	Oct. 27	UTSC	Sound lab 2 + CS	Passerines part 3	4
9	Nov. 3	UTSC	Sound lab 3A + CS	Shorebirds	5
10	Nov. 10	UTSC	Sound lab 3B + CS	Water birds	
11	Nov. 17	UTSC	Point Count Lab	Review	6
12	Nov. 24	Offsite	ROM Field Trip	-	-
13	Dec. 1	UTSC	**TUTORIAL EXAM**		

Please assume that you will be going out into the field at least part of every tutorial session, and dress accordingly. Unless told otherwise, bring your field guide and binoculars (if you own them) with you to each tutorial.

Students are expected to make their own way to most field sites (there will be a limited amount of space in a UTSC van), so please talk to each other regarding carpooling. You are expected to be at each tutorial session's location by the allotted start time (9am). Late students may be left behind, so please be on time!