Sept. 3, 2014

Syllabus for EEB322—FALL 2014—Behaviour and Behavioural Ecology

This course presents a broad introduction to animal behaviour emphasizing concepts from ethology and behavioural ecology. Field and laboratory studies are undertaken.

Time and Place:Lectures: Ramsay Wright room 110, Mon. and Wed. 11-12
Labs: Room RW214, RW216 and other rooms as needed. See Lab
Schedule handout for more information (available in lecture and on
Blackboard). You must attend the lab section for which you are
enrolled (Tues. 2-5 (P101) Wed. 2-5 (P201), Thurs. 1-4 (P301)).

Instructors:

Dr. David Punzalan, <u>david.punzalan@utoronto.ca</u>, course coordinator, RW513 Dr. Becky Raboy, <u>becky.raboy@utoronto.ca</u>, RW508

Office hours available by appointment.

Teaching Assistants:

Graduate students, like your TAs, are often away from their desks doing experiments, attending meetings, courses, etc. If you want to meet with your TA outside of regular lab times, you must email them in advance to make an appointment unless they have indicated their office hours to you. Do not expect your TA to answer emails sent after 6pm until the following day at the earliest.

Anna Li: < annayutian.li@mail.utoronto.ca> RW415 Greg Stegeman: <g.stegeman@utoronto.ca> ESC 2047 Alex De Serrano: <a.deserrano@utoronto.ca> RW507

Prerequisites: BIO120 and a course in statistics (e.g. EEB225/ PSY201H1/ STA220H1/ 250H1/ 257H1/ GGR270; see below for more information)

Emails:

Email messages to the course instructors and TAs must include in the subject line the course identifier and a concise and clear statement of purpose [e.g. EEB322: Squirrel foraging data]; otherwise it is likely to be deleted, along with spam messages.

Please make sure you consult the course syllabus, other handouts, and the course website before submitting inquiries by email. Do not expect the course instructors or the TAs to answer emails sent after 5pm until the following day at the earliest.

*Note: When emailing Instructors and Teaching Assistants, always include "EEB 322" as part of the subject header.

Course website:

See information below about using the Blackboard EEB322 course website. Lab information, announcements, lectures, etc. will be posted on the course website on Blackboard.

Topics covered in lectures:

<u>D. Punzalan will cover these topics</u>: Aims and methods of the study of animal behaviour, behaviour genetics, parental care, mating systems, other aspects of social behaviour (e.g. reproductive skew), migration and navigation

<u>B. Raboy will cover these topics:</u> Foraging, anti-predator tactics, signals and communication, and the interface of animal behaviour and conservation biology

Other topics covered in the course may include territoriality, habitat selection, dispersal and aggression.

Course pre-requisite:

A course in statistics (EEB225/PSY201H/STA220H/250H/257/GGR270) is a prerequisite for this course. If you have not taken one of these courses in statistics, you must email Helen Rodd <Helen.rodd@utoronto.ca> about this requirement or you may be removed from the course. For the labs in this course, you will be required to run and interpret the results of the following analyses: Chi-square, t-tests and two-way ANOVAs.

Course exclusion:

If you have taken a course in animal behaviour at UTM, UTSC, or another university, you must email Helen Rodd <Helen.rodd@utoronto.ca> about this.

Lab schedule and information:

See the lab schedule handout (available in lecture and on Blackboard) for information on all of the labs and lab assignments. There is no formal lab for the lab in the first week of classes, but you must purchase your lab manual during the lab time. Also, assignments are due for the second lab; see the lab schedule for information on those assignments.

Marking scheme:

Laboratory I - Squirrel foraging: Foraging paper exercise: 1% Introduction: 2% Final report (Results section, answer questions in lab outline): 7%

Term Test: 12% Wed. Oct 1, 2013. This test will be written during the usual lecture time in RW110. Questions will be short answer and essay-type. See below about missed tests.

Laboratory II - Cricket study: 12% (see Blackboard in the Announcements section for a detailed marking scheme)

Laboratory III - The individual project:
Proposal Draft: 4%
Proposal Revision: 1%
Class presentation of results: 4%
Final formal report: 15% (see Blackboard in the Announcements section for detailed marking scheme)

Lab participation including questions in Lab III presentations and quizzes: 4%

Exam (in the final exam period): 38%

NOTE: Late assignments (except the proposal for Lab III) will be devalued by 5% per calendar day, up to a total of 25% (this is an absolute 5% per day, i.e. one day late and a 73% goes to 68%). Late proposals for Lab III will be devalued by 5% per calendar day until the date on which you do Part 2 of Lab II; on that date, the grade for your proposal will be zero. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc. will be entertained by David Punzalan only when supported by written documentation (e.g., a completed U of T medical certificate).

Missed tests:

In the unfortunate event of illness on the test day, you must give David Punzalan a written statement to that effect from the university health service or an outside medical professional, e.g. MD, RN, in order to be allowed to write a make-up test. If your absence is caused by a personal or family crisis, you must provide a written statement to that effect from your college registrar or his/her representative.

To conserve paper:

For your lab assignments, do not submit a separate cover page (which is mostly blank) and, if possible, print your assignments on both sides of the page (learn how at: printdoublesided.sa.utoronto.ca).

Required materials:

Lab Manual for EEB322: see the Lab Schedule for the location and times when this manual can be purchased (this must be done during the labs during first week of classes).

Recommended behaviour textbook:

If you need to do extra reading to compliment the lectures, we recommend: *Animal Behavior: An Evolutionary Approach* by J. Alcock (either 2005 or 2009) Eighth or ninth edition. This book is on Short Term Loan in the Earth Science Library (QL751 .A58 2009 (or 2005)) and is also available in other U of T Libraries.

Recommended statistics books:

Whitlock, M.C. and D. Schluter. (2009). *The Analysis of Biological Data*. Roberts and Co. Publishers, Greenwood Village, CO. (available at Gerstein).

Quinn, G.P. and M.J. Keough (2002). Experimental Design and Data Analysis for Biologists. Cambridge Univ. Press. 556pp.

Sokal, R. R. and F. J. Rohlf (1995) *Biometry: the principles and practice of statistics in biological research* by 3rd edition. W. H. Freeman and Co.: New York. 887 pp. ISBN: 0-7167-2411-1 (widely available at U of T libraries, any edition is fine)
Zar, J.H. (1999) *Biostatistical Analysis* by Prentice Hall, New Jersey, 663 pp. (widely available at U of T libraries, any edition is fine)

Course content:

You will be held responsible for all required material introduced in the course, whether through lectures, handouts, assigned readings, postings on the course web site, audio-visual presentations, or laboratory and related work. However note: some readings are suggested readings only; they are for cases where you are confused or would like more background on a topic or example. The information in this outline is subject to change with notice by announcement in any scheduled class meeting and/or on the course web site.

The Teaching Assistants run labs and grade all of the lab assignments. Instructions about the assignments are in the Lab Schedule and in the lab manual, and will be described in your lab. Directions for assignment submission are included in the Lab Schedule.

Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or http://studentlife.utoronto.ca/accessibility.

Audio recording of lectures:

Lecture presentations are the intellectual property of the instructor; you must obtain permission to record lectures. Such audio recordings are for personal use only by students enrolled in EEB322H1F. The distribution, transmission, reproduction, or re-posting of the EEB322H1F lecture materials including audio recordings, in part or whole, is strictly prohibited without the written permission of the instructor. Sharing of recordings among classmates is also prohibited unless specific arrangements are made with the instructor ahead of time. Special consideration is granted to students with disabilities; please ask about the arrangements that can be made in those cases. If you bring a personal recording device to the front of the room, you do so at your own risk and you assume responsibility if it is lost or stolen. Students are advised not to treat recordings as a substitute for attending lectures and taking notes. Permission to record lectures may be taken away if such points are disregarded.

PLAGIARISM: <u>READ THIS</u>

In this course, you will collect your data with a partner. This collaboration must be acknowledged in the material and methods section of your reports. You are encouraged to discuss your data with other students and your teaching assistant. However this is where collaboration must cease. The wording of your report must be yours; the statistical analyses must either be yours or have been provided on the course website. Therefore the writing and figures for which you will get credit must be yours and not anyone else's. Also keep in mind, because there are strict page limitations in this course, your use of direct quotations from sources must be limited. You may in fact lower your grades by quoting others extensively. Paraphrasing is preferred.

In this course, the following are considered to be examples of plagiarism:

- Submitting a report wholly or in part copied from one done in a previous year. Reports that appear to be based on previous years' datasets or formats will be considered to be plagiarised.
- Copying sentences from published works in scientific journals or the lab manual and not enclosing them in quotation marks with the proper reference. Copying sentences from the sources listed above and doing minor edits on the word order, substituting single words here and there, etc.
- Copying the analyses of collaborative work done in the labs. Raw data will be collected in groups but subsequent analyses (except those provided on the course website) and interpretations must be done by each student individually.

Put it in your own words!!

Eight word "rule". If you use more than eight words, together (that is, from one sentence), from a source, if they are not in quotation marks, you have plagiarized.

According to University policy, TAs must notify the professor of any case of suspected plagiarism; the professor will talk to the student(s) involved and then, if the situation warrants, pass the material on to the representative for the Dean of Arts and Science. Students found guilty of wilful plagiarism face penalties ranging from severe mark deductions to suspension from the university. **These penalties can have permanent effects on a student's post-graduate opportunities**. If you have any questions about the validity of your work please ask your TA or your professor.

For additional information, please see:

- "How Not to Plagiarize", the useful guide on referencing and citations prepared by the U of T Writing Centre: (<u>http://www.writing.utoronto.ca/advice/using-</u> <u>sources/how-not-to-plagiarize</u>). This is also available in your lab manual in the section on writing.
- 2) The section on Academic Integrity (below) and the lab manual for more information.

Information about Turnitin.com:

"Normally, students will be required to submit their course assignments to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their assignments 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".

Email Communication from the Course Instructor:

At times, the course instructors will send out important course information by email and those emails will go to your UofT email address. All UofT students are required to have a valid UofT email address and you are responsible for ensuring that your UofT email address is set up AND properly entered in the ROSI system. To submit the information to activate your UTORid and password (see below), you will need to click the "Validate" button. Follow the instructions on the subsequent screens to receive your utoronto.ca address. Once you have your UofT email address, go to the ROSI system (www.rosi.utoronto.ca), log in and update the system with your new UofT email address.

Off-campus safety during the squirrel foraging lab experiment:

For Lab I (squirrel foraging), you will be doing an experiment at a park (of your choice). Students are encouraged to travel and do the experiment with a partner. In the case of an emergency, please call 911 and let the Course Coordinator know about the problem after it has been resolved. September can be cold and rainy, please dress appropriately.

Logging in to the EEB322 Blackboard Course Website:

NOTE: YOU MUST REGISTER YOUR UTORid ON ROSI (this is UofT policy)

Like many other courses, EEB322 uses Blackboard for its course website. To access the EEB322 website, or any other Blackboard-based course website, go to the UofT portal login page at <u>http://portal.utoronto.ca</u> and log in using your UTORid and password. Once you have logged in to the portal using your UTORid and password, look for the My Courses module on My Page, where you'll find the link to the EEB322 course website along with the link to all your other Blackboard-based courses.

Activating your UTORid and password:

If you need information on how to activate your UTORid and set your password for the first time, please go to <u>www.utorid.utoronto.ca</u>. Under the "First Time Users" area, click on "activate your UTORid" (if you are new to the university) or "create your UTORid" (if you are a returning student), then follow the instructions. New students who use the link to "activate your UTORid" will find reference to a "Secret Activation Key". This was originally issued to you when you picked up your Tcard at the library. If you have lost your Secret Activation Key you can call 416-978-HELP or visit the Help Desk at the Information Commons on the ground floor of Robarts Library to be issued a new one. The course instructor will not be able to help you with this. 416-978-HELP and the Help Desk at the Information Commons can also answer any other questions you may have about your UTORid and password.

You can check your UofT email account from:

1. <u>https://weblogin.utoronto.ca/</u> Enter your UTORid and password, and when the Welcome page opens, click "WEBMAIL" (you may need to click "The University of Toronto" before you see the Webmail option).

2. Email software installed on your computer, for example Microsoft Outlook or Mozilla Thunderbird. Visit the Help Desk at the Information Commons or call 416-978-HELP for help with the set up.

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that emails from your course instructor may end up in your spam or junk mail folder.

You are responsible for: 1) Ensuring you have a valid UofT email address that is properly entered in the ROSI system and 2) Checking your UofT email account on a regular basis.

Academic integrity:

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves.

Familiarize yourself with the University of Toronto's *Code of Behaviour on Academic Matters* (). It is the rule book for academic behaviour at the U of T, and you are expected to know the rules. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Copying material word-for-word from a source (including lecture and study group notes) and not placing the words within quotation marks.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Including references to sources that you did not use.
- Obtaining or providing unauthorized assistance on any assignment including
 - working in groups on assignments that are supposed to be individual work,
 - having someone rewrite or add material to your work while "editing".
- Lending your work to a classmate who submits it as his/her own without your permission.

On tests and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Letting someone else look at your answers.
- Misrepresenting your identity.

• Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying or altering any documentation required by the University, including doctor's notes.
- Falsifying institutional documents or grades.

The University of Toronto treats cases of academic misconduct very seriously. All suspected cases of academic dishonesty will be investigated following the procedures outlined in the *Code*. The consequences for academic misconduct can be severe, including a failure in the course and a notation on your transcript. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me. If you have questions about appropriate research and citation methods, seek out additional information from the lab manual, the ClassApp:Biology app available on itunes (or soon for Android devices), a course instructor or TA, or from other available campus resources like the <u>U of T Writing Website</u>

(e.g. http://www.writing.utoronto.ca/faqs/first-university-paper). If you are experiencing personal challenges that are having an impact on your academic work, please speak to one of the instructors or seek the advice of your college registrar.

For more information about academic integrity please use this link: www.artsci.utoronto.ca/osai/students