BIOD53H3S: SPECIAL TOPICS IN BEHAVIOURAL ECOLOGY
Winter Session 2013 • Dept. of Biological Sciences, UTSC

COURSE SYLLABUS

INSTRUCTOR: Dr. K. N. Persaud (kpersaud@utsc.utoronto.ca)
Office Hrs: (AC320C) Monday: 2:00pm - 4:00pm
(…or feel free to email to make an appointment!)
Thursday: 9:30am - 11:00am
Office Hrs: (SW551) Available upon request

T.A.: Emily Macleod (emily.macleod@utoronto.ca)
Office Hrs: (SW551)

Lectures: (BV363) Monday: 12:00am – 2:00pm
(…or feel free to email to make an appointment!)
Friday: 1:00pm - 3:00pm

Prereq.: BIOC54H
Exclu.$^n$: EEB496Y, (BGY53H), (BIO496Y)
NOTE: Prerequisites MUST be met. If, when BIOD53H begins, you have not already passed BIOC54H you WILL be removed from this course.

Communica$^n$: “Blackboard” (announcements, notes, assignments, etc.)

Readings: There is no textbook for this course.
Library links to peer-reviewed journal articles will be posted on Blackboard.

COURSE OVERVIEW:

Chosen themes within the field of “Behavioural Ecology” serve as the subject matter of this course.

“BEHAVIOURAL ECOLOGY” is the study of the behaviours contributing to the fitness of animals interacting with their environment.

The five themes we will be exploring are:

1. SEXUAL CONFLICT
2. SEX-ROLE REVERSAL
3. SOCIAL LEARNING & ANIMAL CULTURE
4. BEHAVIOURAL SYNDROMES & ANIMAL PERSONALITIES
5. HUMAN BEHAVIOURAL ECOLOGY

In addition to learning how behavioural ecologists have attempted to explain why animals do what they do, you will have the opportunity to discover what questions researchers are currently interested in asking. That is, you will become familiar with some of the fundamental theories which underlie the study of behavioural ecology and appreciate how such theories help relate to what behavioural ecologists study today.

The pursuit of scientific truth is a collective effort that involves scientists building upon each other’s ideas and findings. Similarly, in this course, you will engage in a collective learning process where the totality of knowledge gained will be the product of all student reporting, questioning, and discussion.
LEARNING GOALS:
By the end of this course you will have
1) gained knowledge of what behavioural ecologists have discovered about selected topics within the field.
2) become familiar with some of the methodologies & approaches used to answer questions in behavioural ecology.
3) become skilled at reading primary literature, extracting relevant information and critically assessing methodologies and interpretations.
4) experienced how scientific knowledge evolves as the findings of one study evokes further questions and theories to be tested in new studies.
5) experienced how learning can be a cooperative effort as ideas are exchanged and integrated.

COURSE STRUCTURE:
This course is a senior-level “SEMINAR” course. Seminar courses model the type of courses offered in graduate school where an instructor selects a few general themes of interests and guides the collective learning of a relatively small group of students. Though I, your instructor, will provide you with factual overviews of the various themes I have chosen to be covered, much of the content in this course will be provided by you, the student. Every student in this course will serve as both a teacher and a learner and the knowledge one student gains will largely depend on what the others contribute.

This class meets twice a week. I will use some of the 2-hr Friday session to provide you with an overview of the theme being covered in that part of the course (“instructor-delivered content”). You will also be assigned a related review paper to be read before class. This background reading will enable you to actively engage with the material being delivered. Questions, comments and discussion are welcomed and encouraged.

The 2-hr Monday sessions are reserved for the “student-led seminars”. A student-led seminar is approximately one hour in length and led by two students who have chosen a currently-studied subtopic of interest that relates to main theme being discussed during that part of the course. Seminar leaders will typically spend the first third of their time presenting their subtopic to the class and the last two-thirds of their seminar leading/facilitating a class discussion. Seminar participants (the class), having already read a background paper selected and assigned by the seminar leaders, will engage in active discussion around the chosen subtopic.

Material from all sources (assigned readings, instructor-delivered content, student-led seminars and class discussions) is testable.

HOW TO DO WELL IN THIS COURSE...

1. COMMUNICATION
(a) ANNOUNCEMENTS: The main source of information for this course, including emergency postings and announcements, is the course Blackboard page. You are responsible for monitoring the
course Blackboard page *regularly* for updates. In addition, readings, presentation slides, handouts, assignments and forms will be posted on Blackboard.

*Email announcements are automatically sent through Blackboard to your “.utoronto.ca” account and thus you are responsible for either regularly checking your “.utoronto.ca” account or having it forwarded to the email account you typically use.”

(b) **T.A. & Instructor:** Questions for your instructor include those about the course structure, instructor-delivered content and the suitability of a proposed seminar topic. Questions for your T.A. include those about possible seminar topics, finding and choosing articles and the course assignment. Please direct questions to only one person at a time. (Questions being simultaneously addressed by more than one person take valuable time away from other students needing help.)

When seeking assistance you should make every effort possible to attend **Office Hours.** These hours have been specially set aside so that we can focus on your needs. Though email may be used at times when you have a specific question that requires a short answer, email will be responded to as time permits. If you are absolutely unable to attend office hours, please email to schedule an appointment.

(c) **Peers:** One of the most useful resources you have available to you is your fellow classmate. It is highly recommended that you exchange contact information with at least one other student in the course. **Notes from missed classes will NOT be lent out by myself or your T.A.**

Please note that all students have the right to learn in an environment that is safe and free from hostility or harassment of any kind. If, at any time, you feel unsafe or threatened in any way, please contact me, your T.A., the Special Advisor on Equity Issues at the University of Toronto Scarborough (416-287-7296) and/or University Police (416-287-7398).

## 2. Attendance

As mentioned above, this is a seminar course in which the learning of each student is largely dependent on the involvement of each other student. **Therefore, class attendance is required.** You will notice the relatively large portion of the overall course mark which represents “Participation” (13%). Class attendance is monitored and contributes to your “Participation” grade.

If you are unable to attend a class session, you should contact the course instructor as soon as possible, even prior to your absence if known. Documentation may be required. Students are responsible for obtaining any missed material from a fellow student. If you miss class the day of your presentation or the midterm, documentation WILL be required before accommodations will be made.

Please be mindful that “attending” class means more than just your physical presence. Seminar courses are necessarily small, with the benefit that this facilitates interactive learning. However, a small class size also means that to a presenter (whether they be the instructor, the T.A. or one of your classmates), the activities of his or her listeners are very noticeable. Please treat class presenters with respect by providing them with your attention and not working on other assignments, talking with others, texting, surfing the web, etc.
Finally, it should be noted that there is no WebOption for this course and students must be available to attend the scheduled lecture times. That is, no accommodations will be made for students who have chosen to enroll themselves in a conflicting course. Note that the course midterm is held in-class and any student who does not write must have a medical note or acceptable documentation.

3. NOTES & READINGS

(a) *Lecture Notes:* Any lecture slides presented by either the instructor or student seminar leaders will be posted on the course Blackboard site a day or two after they are presented. Not all testable material, however, will be on lecture slides. You are responsible for taking notes in class on what is said and discussed.

(b) *Readings:* Academic papers will be assigned to be read in preparation for each class (for both instructor-led sessions and student-led seminars). Library links to these readings will be posted on Blackboard. It is essential that you complete your assigned readings IN ADVANCE so that you can effectively contribute during class in an informed manner. All readings have been chosen with the expectation that students in this course (with their level of knowledge and experience) can read them with understanding. If you feel unable to grasp key concepts in any one of the readings, please contact your T.A. or myself.

4. ACADEMIC INTEGRITY:

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student’s individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto’s Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

**In Papers & Assignments:** Using someone else’s ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

**On Tests & Exams:** Using or possessing unauthorized aids, looking at someone else’s answers during an exam or test, misrepresenting your identity.

**In Academic Work:** Falsifying institutional documents or grades, falsifying or altering any documentation required by the University, including (but not limited to) doctor’s notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see http://www.utoronto.ca/academicintegrity/).
5. CAMPUS RESOURCES

As UTSC students, you are fortunate to have access to many resources offering additional academic assistance:

**ACADEMIC ADVISING AND CAREER COUNSELING** (AACC: www.utsc.utoronto.ca/~counselling/) provides both seminars and individual consultations on effective note taking, reading and study skills.

**THE WRITING CENTRE** (www.utsc.utoronto.ca/~ctlweb/TWC/index.htm) offers specific guidance on scientific writing.

**THE BIOLOGY STUDENT HANDBOOK** (www.utsc.utoronto.ca/~biosci/BiologyStudentHandbook.html) and the Biology Student Association (BioSA: http://www.utsc.utoronto.ca/~biosa/) may also provide you with helpful guidance.

**ACCESSABILITY**: Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

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**EVALUATION**

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<thead>
<tr>
<th>COURSE GRADE BREAKDOWN:</th>
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<tbody>
<tr>
<td>1. SEMINAR</td>
<td>20%</td>
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<tr>
<td></td>
<td>on subtopic to be chosen</td>
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<td>2. PARTICIPATION</td>
<td>13%</td>
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<td></td>
<td>during instructor &amp; student sessions</td>
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<td>3. ASSIGNMENT</td>
<td>10%</td>
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<td>April 5th, electronically &amp; on paper</td>
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<td>4. MIDTERM</td>
<td>20%</td>
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<td>in-class (Feb. 25), short answer</td>
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<td>5. FINAL EXAM</td>
<td>35%</td>
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<td>in exam period, written long answer</td>
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<td>6. POP-QUIZZES (2)</td>
<td>2%</td>
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<td>before 2 student-led seminars</td>
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1. SEMINAR

The goal of this activity is to expose you and the rest of the class to current research in Behavioural Ecology and demonstrate how new questions and ideas relate to overarching theory.

You, along with a partner, will be responsible for leading one 1-hr (50 min.) seminar on a chosen, currently-studied subtopic of interest that relates to the main theme being discussed during that part of the course. Seminar leaders will typically spend the first third of their time presenting their subtopic to the class and the last two-thirds of their seminar leading/facilitating a class discussion. A
workshop on presentation skills and how to facilitate a discussion will be given at the beginning of term.

**Assigning a Class Paper**

One week before your seminar, you will have chosen and assigned the class one primary literature paper (i.e., a first-hand report of a scientific study, not a review) which directly relates to the currently-studied subtopic you have chosen to focus on. The paper must be dated 2005 or after. Seminar participants (the class) will read this paper before your seminar so that they have the necessary background to engage in active discussion.

Although you will have obviously read many more papers related to your subtopic, you will be choosing only one paper for the class to read. Therefore, the assigned paper should be reasonably understandable to your peers without them having to do additional readings. **You will be responsible for informing me, your instructor, of your choice 4-7 days in advance of assigning the paper to the class.** I will not remind you.

**Choosing a “Subtopic”**

There are five general themes that we will be exploring in this course. For each theme, I will first give an overview during a Friday class session, and then during the following two Monday sessions, student pairs will lead seminars around currently-studied subtopics of that theme (with the exception of “Behavioural Syndromes” for which there will only be one Monday session of student seminars).

Students will sign up to present on subtopics of a theme on a first-come, first-serve basis. I would recommend that you first peruse the review articles that have been assigned to be read for the instructor-led sessions. Then, you can research what is currently being studied about that theme. You can also consult your TA or myself for advice about the suitability of a possible subtopic. In addition, I will post some companion papers that may help you choose a subtopic.

Once you have chosen a currently-studied subtopic of a theme that you would like to concentrate on, please contact me to sign-up for your spot (kpersaud@utsc.utoronto.ca). Sign-up starts Friday, January 11th at 6:00am.

**Assessment**

The student seminar represents a substantial portion of the overall grade in this course (20%). Factors that you will be assessed on include, but are not limited to, the following:

- choice of topic (recent, suitable, interesting)
- choice of paper assigned to the class (appropriate, submitted to instructor on time)
- presentation content (knowledge of topic, integration of other researchers’ work)
- presentation style
- discussion facilitation (encouraging participants, posing questions, directing discussion)

Further details on how the seminars will be assessed will be posted.

**2. Participation**

The success of this course depends, in large part, on how much each student contributes to the collective learning of the class. Therefore participation represents a relatively large portion of the
overall course grade. As mentioned above, a portion of your participation mark will be based on your attendance (which includes your attentiveness and receptivity). The remainder will be based on your informed contribution to classroom dialogue. This includes raising points, asking good questions, challenging ideas and so on. The most valuable input comes from students who have completed the assigned readings.

I recognize that public speaking is more challenging for some than for others. There are however, some strategies that can be employed so that speaking up becomes a little less daunting. For example, when doing your readings, jot down possible points or questions you might bring up during class. This way you are prepared and do not have to rely on thinking, on the spot, of ways to contribute.

3. ASSIGNMENT

There will be a written assignment for this course worth 10% of your final grade. The assignment will be due close to the end of the term. Details about the written assignment and its due date will be given by the end of the first week of classes.

4. MIDTERM

The midterm will assess understanding, and some recall, of what is presented and discussed during both the instructor-led sessions and the student-led seminars. The assigned readings also contain testable material.

The midterm will be 90 minutes and held in class on February 25th, 2013. It will be comprised on short answer questions. You will be tested primarily on your understanding of concepts. Synthesis of ideas from multiple themes and sources, as well as some straight recall of important terms, theories and facts, will also be assessed. Sample questions will be provided in advance. If you miss the midterm exam, you must provide valid documentation (e.g. UTSC medical certificate) dated the day of the test. There will be no make-up test. Instead, your assignment and final exam will be reweighted.

5. QUIZZES

There will be two pop quizzes held at the beginning of two student-led sessions which will be worth 1% each. The quizzes will focus on the assigned readings for the student-led seminar(s) that day.
The purpose of these quizzes is to further encourage seminar participants to complete the assigned readings before coming to class.

### TENTATIVE COURSE SCHEDULE

<table>
<thead>
<tr>
<th>THEME</th>
<th>INSTRUCTOR-LED SESSIONS (FRIDAYS 1-3PM)</th>
<th>STUDENT-LED SEMINARS (MONDAYS 12-2PM)</th>
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<tbody>
<tr>
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<td>Jan. 7th: <em>Course overview &amp; Syllabus</em></td>
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<td>BEHA ViOUAL ECOLOGY</td>
<td>Jan 11th: Behavioural Ecology</td>
<td>Jan. 14th: <em>Presentation Skills &amp; Discussion Facilitation</em></td>
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<td>Jan. 18th: Sexual Conflict I</td>
<td>Jan. 21st: Sexual Conflict I</td>
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<td>Jan. 25th: Sexual Conflict II</td>
<td>Jan. 28th: Sexual Conflict II</td>
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<td>BEHA ViOUAL SYNDROMES</td>
<td>Feb. 1st: Behavioural Syndromes</td>
<td>Feb. 4th: Behavioural Syndromes</td>
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<tr>
<td>SOCIAL LEARNING I</td>
<td>Feb. 8th: Social Learning I</td>
<td>Feb. 11th: Social Learning I</td>
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<td>Feb. 15th: <em>TA-lead seminar</em></td>
<td>Feb. 18th: <em>NO CLASS (Reading Week)</em></td>
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<td>Feb. 22nd: <em>NO CLASS (Reading Week)</em></td>
<td>FEB. 25th: <em>MIDTERM TEST (IN-CLASS)</em></td>
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<td>SOCIAL LEARNING II</td>
<td>Mar. 1st: <em>TA-lead seminar</em></td>
<td>MAR. 4th: Social Learning II</td>
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<td>5</td>
<td>Mar. 22nd: Sex Role-Reversal I</td>
<td>Mar. 25th: Sex Role-Reversal I</td>
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<td>Mar. 29th: Sex. Role-Reversal II</td>
<td>Apr. 1st: Sex Role Reversal II</td>
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<td>Apr. 5th: <em>Course wrap-up &amp; Assignment Due</em></td>
<td>Apr. 8th: No class</td>
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