

## NROC34: Neuroethology

Fall 2020

Instructor: Prof. Tod Thiele

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Office: SW534

Lectures: Thursdays 3-5 pm live on Bb Collaborate

Office Hours: Mondays 10-11:30 am on Bb Collaborate

TA: Nick Guilbeault

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There is no required textbook for the course. Readings will be assigned weekly and will primarily consist of journal articles. You must be connected to the UofT network to access most of these articles.

### Course Policies:

You will be evaluated by the following: two reading critiques, midterm exam, final exam and an optional group presentation. Grade breakdown without a presentation:

Reading critiques	Midterm Exam	Non-Cumulative Final Exam
10%	40%	50%

Grade breakdown with the optional presentation:

Reading critiques	Midterm Exam	Group Presentation	Non-Cumulative Final Exam
10%	40%	10%	40%

### Lectures:

Lectures will be given live Thursdays from 3-5 pm on Bb Collaborate. Lectures will also be recorded and uploaded onto Quercus.

### Questions:

I will have the policy of not answering questions about course material over email. If you have questions post them to the Quercus discussion board and I will answer them every Monday. You must virtually raise your hand if you have questions during lecture, I will not answer chat questions.

### Exams:

Both exams will cover all lecture material and all assigned readings. The final exam is non-cumulative. Exams will be a combination of multiple-choice questions, matching questions, short answer and essay questions. UTSC academic ethics/cheating policies will be enforced. See policies at the end of the syllabus.

**Reading Critique:**

Twice during the term you will be asked to submit a reading critique. These critiques are meant to ensure that you are thoughtfully reading the assigned material. Students selected to do a critique will be listed in a Quercus announcement each week after lecture. You must submit your critique on Quercus by beginning of the next lecture (i.e. 3 pm Thursday). Late critiques will not be accepted. Turnitin will be used to ensure your work is original.

Critique options:

1) Use half a page to critique one of the assigned readings. You can discuss a particular strength or weakness you found in the methods or experimental designs. You can also write about the conclusions the authors make or the types of experiments you would like to see done next. If it is a review paper, summarize the most important concept you took away from the reading.

2) Write three questions related to aspects of the paper(s) you are curious about. These can be related to the results (i.e. How does experiment x lead to the authors' conclusion y?). You can also ask about experimental procedures or topics in the discussion.

3) Write three exam questions (with answers) related to the readings. Two questions should be multiple-choice (four choices) and one should be a short-answer. Good questions may appear on the tests!

Further details and a rubric for critique grading is on Quercus.

**Optional Group Presentation:**

Students may work in teams of 3-4 to present an article on Neuroethology research. Presentations (10-15 mins) will be recorded by each team and uploaded to Quercus during the last two weeks of the term. Teams can use Bb Collaborate, Zoom or any other method to make their presentation recording. Some potential presentation topics and papers are provided on Quercus.

Teams may also choose their own topic and research paper with my approval. Due to the limited number of presentation slots, teams will be granted permission on a first-come, first-served basis. Teams must decide to do a presentation before the midterm.

**Test Policies:**

A make-up midterm exam will only be administered for students who present a medical certificate within two days of the test:

[https://www.utsc.utoronto.ca/~registrar/resources/pdf\\_general/UTSCmedicalcertificate.pdf](https://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf)

You must also email me immediately if you were unable to take the midterm. Certificates will be verified. Students without a valid reason will receive a zero. There will only be one make up time for the midterm. Students who miss the final exam must petition.

**Schedule**  
(Topics and timing may change)

Date	Lecture	Topic	Readings
Sept 10	1	Introduction to Neuroethology; Neurophysiology review; Central pattern generation: Stomatogastric ganglion (STG)	Quercus
Sept 17	2	STG II: Modulation / Vision: Pattern learning in bees	-
Sept 24	3	Vision: Pattern II / Motion Vision I	-
Oct 1	4	Vision: Motion Vision II	
Oct 8	5	Birdsong	-
Oct 22	6	Midterm (in class)	-
Oct 29	7	Hearing in insects / Presentation Guidelines	-
Nov 5	8	Chemosensation 1: Olfaction Drosophila	-
Nov 12	9	Chemosensation 2: Chemotaxis in C. elegans	-
Nov 19	10	Prey-Capture / Predator avoidance zebrafish	-
Nov 26	11	TBA / Presentations	-
Dec 3	12	Presentations...	
Dec 10-22		Final Exam Period	

**Access for students with disabilities:** 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. AccessAbility Services staff (located in Rm AA142) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email: [ability@utsc.utoronto.ca](mailto:ability@utsc.utoronto.ca)

**Academic integrity:** 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 in papers and assignments include 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.

For tests and exams, cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

THE UNIVERSITY OF TORONTO'S CODE OF BEHAVIOUR ON ACADEMIC MATTERS APPLIES TO ALL UNIVERSITY OF TORONTO SCARBOROUGH STUDENTS. THE CODE PROHIBITS ALL FORMS OF ACADEMIC DISHONESTY INCLUDING, BUT NOT LIMITED TO, CHEATING, PLAGIARISM, AND THE USE OF UNAUTHORIZED AIDS. STUDENTS VIOLATING THIS CODE MAY BE SUBJECT TO PENALTIES UP TO AND INCLUDING SUSPENSION OR EXPULSION FROM THE UNIVERSITY.

CODE OF BEHAVIOUR ON ACADEMIC MATTERS - SECTION B1 1. It shall be an offence for a student knowingly:

- (a) to forge or in any other way alter or falsify any document or evidence required by the University, or to utter, circulate or make use of any such forged, altered or falsified document, whether the record be in print or electronic form;
- (b) to use or possess an unauthorized aid or aids or obtain unauthorized assistance in any academic examination or term test or in connection with any other form of academic work; (c) to personate another person, or to have another person personate, at any academic examination or term test or in connection with any other form of academic work;
- (d) to represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism (for a more detailed account of plagiarism, see Appendix "A") ;
- (e) to submit, without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or program of study in the University or elsewhere;
- (f) to submit any academic work containing a purported statement of fact or reference to a source which has been concocted.

**Intellectual property:** All course content is considered intellectual property (IP) of the University and instructor. Posting of any materials online is an infringement of University policies and is taken very seriously. Please alert me if you become aware of IP belonging to others (past or present) circulating, either through the student body or online.

**Turnitin university statement:**

"Normally, students will be required to submit their course essays to Turnitin.com for a 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".