

NRO C63F
FALL 2013 - TENTATIVE
Dr. Janelle LeBoutillier
Office: S557

Professor: Dr. Janelle LeBoutillier

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Office Hours: By individual appointment

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Lectures: Wed 2-4 SW 316
Course information and content will be posted to BB.

Labs: Mon 10-1 SW 148

Course Overview:

This neuroscience laboratory course is designed for senior students in the Neuroscience Specialist Program. Its main goal is to provide students with laboratory research experience. It is anticipated that you will learn fundamentals of research in behavioural neuroscience and anatomy through active laboratory demonstrations, assignments, and lectures. Course information and content will be posted to BB.

Because of the nature of a laboratory course, expectations of students are unique with respect to time commitment. Although there is a 3-hour time slot devoted to this course each week, students will often be required to devote extra time on multiple days to some aspect of the experiment. It is absolutely critical that procedures are completed as planned and if you are unable to complete a planned procedure, it is your responsibility to contact other students in the class that can take your place. As a last resort, you can contact the TA or myself. In addition, some of the lab assignments will require the collection of independent data which will be pooled with all members of the class. Failure to meet these deadlines will have consequences on all members of the class. If you are negligent in any aspect of duties related to this course (experimental procedures, animal care), you will be suspended from the lab portion of the course immediately and this will have serious consequences for your participation mark and your final report and your final grade

Course Objectives:

- To design and conduct an original research project
- To develop experience with behavioural and neuroanatomical techniques in neuroscience
- To develop a working knowledge of relevant research literature
- To practice scientific writing
- To be able to discuss the research and topic with other neuroscientists

Grading:

10%	Cell Density Lab
5%	Detailed behavioral procedures (due Sept 30)
5%	Ethics quiz and behavioural Training
5%	Protocol Assignment (due Sept 25)
10%	Literature review; Introduction to paper (due Nov 6)
25%	Final exam on lectures and assigned readings
15%	Seminar and laboratory performance
25%	Final research paper, (due Dec 2)

Schedule:

Sept 4	Course introduction, explanation of projects
Sept 9	Lab Administration, Tour and Rules, Cell Density Lab Introduced
Sept 11	Animal Ethics
Sept 16	Demonstration of Behavioural Techniques Part 1 Animal husbandry and handling begins
Sept 18	Experimental Design, Hypothesis and Behavioural Testing Procedures Assigned
Sept 23	Demonstration of Behavioural Techniques Part 2
Sept 25	Behavioural Testing Procedures
Sept 30	Behavioural Testing
Oct 2	Behavioural Testing Procedures continued, Protocol Writing
Oct 7	Behavioural Testing Mon to Fri Schedule
Oct 9	Labs, no lecture scheduled
Oct 14	Thanksgiving Holiday
Oct 16	Reading Week
Oct 21	Behavioural Testing, Cell Density Lab Introduced
Oct 23	Research Writing: Introduction Bring an empirical paper to the class
Oct 28	Behavioural Testing, Cell Density Lab Continues
Oct 30	Research Writing: Cover Page, Title, Methods
Nov 4	Cell Density Data Due for Group Project
Nov 6	Behavioural Data Collection and Data Analysis
Nov 11	Dissections
Nov 13	Dissections Continued
Nov 18	Cell Density Lab Due
Nov 20	Research Writing: Results and Discussion
Nov 25	Lab Wrap-up
Nov 27	Final Paper Wrap-Up/ Final Exam Review

Dec 2

Final Lab Report Due

Final Paper Format;

Refer to http://www.jneurosci.org/site/misc/ifa_organization.xhtml Please note that the only change for our course from these guidelines is the length of the introduction. The word restriction does not apply to our course.