

NROC64: SENSORIMOTOR SYSTEMS

Instructor

Dr. Angelina
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Office Location

P103- Rm 123

Office Hours

Tuesday 4:10-5pm or
by appointment

Course Information

Tuesday 5-7pm

AA112

Prerequisite: NROB60H3

Exclusion: PSY290H

TA Information

1) Adam Frost- adam.frost@mail.utoronto.ca –**Assignment 2**

2) Jess Chen- jiaqing.chen@mail.utoronto.ca – **Assignment 1**

3) Olivia Tiberio- olivia.tiberio@mail.utoronto.ca -**Content questions**

****Please contact the correct TA depending on your inquiry****

Course Overview

A focus on the mechanisms by which the nervous system processes sensory information and controls movement. The topics include sensory transduction and the physiology for sensory systems (visual, somatosensory, auditory, vestibular). Both spinal and central mechanisms of motor control are also covered.

Mark Breakdown

- Knowledge translation assignment: 10%
- Midterm: 30%
- Research Proposal: 20%
- Final exam: 40%

The midterm and final exam will be non-cumulative. The midterm and final exam will be both multiple choice and short answer.

Course Readings

There is no textbook for the course. Required readings will be articles and text chapters posted on the course website on Blackboard. It is recommended that you read the required readings **before** class. Anything covered in the required readings could be on the exam unless specified otherwise.

Course Schedule

Wk	Date	Subject	Required reading
1	September 5 th	Introduction & Vision 1	An Organ of Exquisite Perfection chapter
2	September 12 th	Vision 2	Visual Pathway chapter Goodale 1992
3	September 19 th	Oculomotor system 1	The Control of Gaze Ocular pursuit movements
4	September 26 th	Oculomotor system 2	The superior colliculus Frontal cortex and flexible control of saccades
5	October 3 rd	Oculomotor system 3 (Assign 1 due)	Eye movements in psychiatric patients
	October 10 th	Reading Week	---
6	October 17th	Midterm	Wk 1-5 (inclusive)
7	October 24 th	Spatial stability	
8	October 31 st	Multisensory perception	
9	November 7 th	Motor systems	
10	November 14 th	Posture	
11	November 21 nd	Higher motor functions, cerebellum, BG	
12	November 28 th	Pointing, reaching and grasping; joint actions	

December 7th-
20th*

Final exam

Wk 6-12 (inclusive)

*pending registrar scheduling

Knowledge translation:

Knowledge Translation is defined as a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system. Knowledge dissemination involves identifying the appropriate audience and tailoring the message and medium to the audience. This assignment is to design an information booklet for parents based on 1 research articles on one specific topic (max 3 pages double-spaced including images). The purpose of this assignment is to give you practice translating research into something that is understandable to a layman population that the research affects. The student will pick a specific infant or childhood development scenario and write a 3 page double-spaced including images paper. The sheet should be written so that an average parent, with a high school education could understand the content. It should include helpful images and/or illustrations such as flow charts or graphs. Please reference **only** outside sources in short form author and year (i.e. Smith, 2017). The information sheet is due **October 17 2017**.

Research proposal:

Students are to use the assigned reading and prepare a research proposal for a future study based on the findings from that paper. The proposal should have sufficient information to convince your readers that you have an important research idea, that you have a good grasp of the relevant literature and the major issues, and that your methodology is sound. The proposal should include an introduction that provides the necessary background or context for your research problem as well as a comprehensive literature review. The Method section should provide your work plan and describe the activities necessary for the completion of your project. You should also include a short paragraph on your hypothesis and what you expect to find. References must be from primary sources and not internet sites like Wikipedia. At least two of the references should be from the last two years. You must format your references using the guidelines developed by the American Psychological Association's Publication Manual (5th edition). The proposals are max 3 double spaced pages. The proposal is due **November 28th 2017**.

Additional Information

- 1) All registered students for the course should have access to Blackboard. This will serve as the class website, where all lecture slides and course-related materials will be posted. This will also be the

site where term test marks will be made available, along with important announcements that will be made throughout the term.

2) The students are responsible to keep up with the required readings and attend the lectures. If there are problems and/or with understanding the course material, it is the student's responsibility to seek out available resources that include asking and discussing with the teaching staff. The professor and teaching assistants are all available by appointment.

3) **Getting Help with Course Materials:** If your question is not answered here in this syllabus or on the course Web site, you may send an e-mail message to one of our TAs, but please allow two working days' time for a reply.

4) During exams, students need to bring their U of T student ID cards (**NO EXCEPTIONS**) and a soft-lead pencil with an eraser for filling in the scantron.

5) Late assignments will receive a 5% per day deduction.

6) **Missed Term Work due to Medical Illness or Other Emergency:**

All students citing a documented reason for missed term work must bring their documentation to the Psychology Course Coordinator in SW427C **within three (3) business days** of the assignment due date. You must bring the following:

- (1.) A completed Request for Missed Term Work form (<http://uoft.me/PSY-MTW>), and
- (2.) Appropriate documentation to verify your illness or emergency, as described below.

Appropriate Documentation:

In the case of missed term work due to **illness**, only an **original copy** of the official UTSC Verification of Illness Form will be accepted (<http://uoft.me/UTSC-Verification-Of-Illness-Form>). Forms are to be **completed in full**, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.

In the case of **medical emergency**, an original copy of the record of visitation to a hospital emergency room should be provided.

In the case of a **death of a family member**, a copy of a death certificate should be provided.

In the case of a **disability-related** concern, an email communication should be sent directly to the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca) from your Disability Consultant at AccessAbility Services, detailing the accommodations required. The Course Instructor should also be copied on this email.

For U of T **Varsity athletic commitments**, an email communication should be sent directly to the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca) from a coach or varsity administrator, detailing the dates and nature of the commitment. The email should be sent **well in advance** of the missed work.

Documents covering the following situations are **NOT acceptable**: medical prescriptions, anything related to personal travel, weddings/personal/work commitments.

Procedure:

Submit your (1.) request form and (2.) medical/other documents in person **within 3 business days** of the missed test or assignment. Forms should be submitted to **SW427C between 9 AM - 4 PM**,

Monday through Friday. If you are unable to meet this deadline for some reason, you must contact the Course Coordinator via email (psychology-undergraduate@utsc.utoronto.ca) within the three business day window. Exceptions to the documentation deadline will only be made under exceptional circumstances.

Within approximately one week, you will receive an email response from the Course Instructor / Course Coordinator detailing the accommodations to be made (if any). You are responsible for checking your official U of T email and Blackboard course announcements daily, as accommodations may be time-critical. The Course Instructor reserves the right to decide what accommodations (if any) will be made for the missed work.

Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.

Note that this policy applies only to missed term work (assignments and midterms). Missed final exams are handled by the Registrar's Office (<http://www.utsc.utoronto.ca/registrar/missing-examination>)

7) 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 as soon as possible.

AccessAbility Services staff (located in Rm SW302, Science Wing) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations [416-287-7560](tel:416-287-7560) or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

8) 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/Assets/Governing+Council+Digital+Assets/Policies/PDF/pjun011995.pdf>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and 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 and exams:

- Using or possessing unauthorized aids;
- Looking at someone else's answers during an exam or test;
- Misrepresenting your identity; and

- When you knew or ought to have known you were doing it.

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; and
- When you knew or ought to have known you were doing so.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

Note:

You may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the *Code of Behaviour on Academic Matters*.

It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust. Students for whom English is not their first language should go to the English Language Development Centre.

If you decide to use these services in spite of this caution, you must keep a draft of your work and any notes you made before you got help and be prepared to give it to your instructor on request.