Course Description v.1a
3250.03A (S1-2017-18) Neural Basis of Behaviour

Section: 3250.03A	Course Director:	Prof. Vinod Goel
Time: Tues & Thur 2:30 – 5:30PM	Office:	235 BSB/ Lab BSB 037
Location: Ross S105	Tel:	please use email
	Email:	vgoel@yorku.ca
	Office Hrs:	Thurs. 5:30 – 6:30PM

Course Prerequisites: AK/AS/HH/SC/PSYC 1010 6.00 or AK/HH/PSYC 2410 6.00, with a minimum grade of C; AK/AS/HH/SC/PSYC 2240 3.00 or AK/HH/PSYC 3145 3.00.

Drop Date: June 18, 2018.

Important Note regarding E-Mail/Internet Use: Severe pains in my arms prevent me from excessive typing. Therefore, please do not send me e-mail, except to make an appointment to meet in person. I will not be able to read and respond to it in a timely manner. I'm happy to answer your questions in class, during the tutorial, during my office hours, or make an appointment to meet with you. I will also stay at the end of each lecture to answer individual questions.

General Description: This will be an introductory course in *cognitive neuroscience*. We will examine both human neuroanatomy/physiology and cognitive functioning and explore how the latter is underwritten by the former. The focus will be on the interplay between the neural and cognitive systems. The course will have a bias towards "higher" cognitive functions such as perception, object recognition, memory, reasoning and problem solving, and hemispheric differences.

Class Format: Lecture format. When time permits, we will try to organize tutorial discussions of topics from lectures and readings, during the 3rd hour.

Assessment:

1) Two tests (70% of grade/ 35% each)
   - Details attached below.
2) Term Paper (30%)

Texts

Gazzaniga, Ivry, &Mangan (2014). Cognitive Neuroscience: The biology of the Mind (4th Edition). Norton and Company.

Note: Older editions are equally good.

Articles:

On Moodle

Tests (75%):
There will be two in-class tests on the dates indicated on the schedule. Each test will have a duration of two hours. The tests will be cumulative. The grade value of each test is indicated above. The test material will be based on the lectures, the textbook, and the indicated articles.

Makeup Tests: Students are expected to write each test on the dates specified. **If you miss a mandatory piece of course work for no documented reasons, you will receive a grade of zero.** If you have a legitimate reason (e.g., death in the family, severe illness, etc.) for being excused from a test/exam, and have documentation to verify your absence, you may write a make-up test, in lieu of the missed test/exam, on the date specified on the schedule. You MUST keep this date and time open as it will be the only chance to write a makeup if you miss a scheduled test. *Please note that one consequence of missing the first scheduled test will be that you will not receive the usual grade feedback by the drop date*. There is no makeup test for the makeup test.

Term Paper (30%):
Write an academic term paper (15-20 pages) addressing one of the questions from the provided list. The paper will be graded not only for content, but also your ability to organize and express your thoughts in a structured, systematic, coherent fashion, using grammatical English sentences organized into paragraphs and sections. Term papers may be submitted to Turnitin or Google to check for plagiarism.

Late Term Papers:
The term paper drafts and final copy are due at the beginning of class on the days indicated in the course schedule. Late assignments will be penalized 1 point if not submitted at the ***beginning*** of class, and one grade point per calendar day thereafter, and ***will not receive feedback***. As you will always have at least 2-3 weeks to complete the assignment, a doctor's note indicating illness will usually not suffice to waive the penalty. To be considered, a doctor's note must indicate that you were incapable of working for at least two weeks during the course of the semester. No assignments will be accepted after the last day of class.

Grades Appeal/Correction: Any questions or concerns regarding grades on tests and assignments must be raised with the instructor within 10 days of the posting of the grade.

Grades and Entitlements:
You are entitled only to the grade that you **earn** in this course. Nothing else. I will **not** increase your grade just because "you need at least a *x* grade to graduate; or you need a *y* grade to get into some other program; or you need a *z* grade to maintain your scholarship;" etc. etc.. It is not fair to other students. If you need a certain grade in this course, please do the required work.

Plagiarism is the passing off of someone else's words and ideas as you own. This is a very serious academic offense. Do your own assignments and acknowledge all your sources. The penalty for plagiarism will be in accordance with the Senate Policy on Academic Honesty which can be found at the following URL:
http://www.yorku.ca/secretariat/policies/document.php?document=69

Student Feedback: I welcome constructive comments on course organization, lectures (content, style, presentation), assignments, etc.

Office Hours: Make use of the office hours. They are for your benefit.

3250.03A Neural Basis of Behaviour
S1 – 2017-18, Tues & Turs 2:30- 5:30pm
Proposed Schedule

Week	Date	Lecture Topics	Readings	Assignments
1	May 22	Intro to Cognitive Neuroscience	Searle Fodor G,I&M/ Chap 1	
2	May 24	CNS Encephalization, Anatomy & Development	Jerison G,I&M/ Chap 2	
3	May 29	Cellular Mechanisms & Computation	G,I&M/ Chap 2	
4	May 31	CNS Methodologies	G,I&M/ Chap 3	
5	June 5	Visual perception Object Recognition	G,I&M/ Chap 5 pp. 163-7; pp.184-215 G,I&M/ Chap 6	
6	June 7	Test 1		
7	June 12	Memory	G,I&M/ Chap 9	
8	June 14	PFC & Complex Cognition 1 Reasoning, Decision Making & Problem Solving		
9	June 19	PFC & Complex Cognition 2 Reasoning, Decision Making & Problem Solving	G,I&M/ Chap 12 Goel	
10	June 21	PFC & Complex Cognition & Role of Emotions	G,I&M/ Chap 10 Goel	Term Paper Due
11	June 26	Hemispheric Specialization	G,I&M/ Chap 4 Goel Marsnick et al.	
12	June 28	Test 2		