

**Faculty of Health**  
**Department of Psychology**  
**PSYC 3250 3.0 A: NEURAL BASIS OF BEHAVIOUR**  
**Tuesday/11:30-2:30/Curtis Lecture Halls (CLH) E**  
**Fall/2018**

---

**Instructor and T.A. Information**

Instructor: Dr. W. Dale Stevens

Office: Sherman Health Science Research Centre, Rm. 2036

Office Phone: 416-736-2100 ext. 44662 [**BUT PLEASE USE EMAIL**]

Office Hours: By appointment

Email: [stevensd@yorku.ca](mailto:stevensd@yorku.ca)

T.A. Naail Khan

Email [naailk90@gmail.com](mailto:naailk90@gmail.com)

Office Sherman Health Science Research Centre, Rm. 1006

Office Hours By appointment

**Course Prerequisite(s): Course prerequisites are strictly enforced**

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2240 3.00 (Biological Basis of Behaviour)

**Course Credit Exclusions**

Please refer to [York Courses Website](#) for a listing of any course credit exclusions.

**Course website:** [Moodle](#)

**Course Description**

This course will review the neural bases of behavior from a cognitive neuroscience perspective, with an emphasis on human cognitive function and dysfunction. Initial lectures will consist of a general introduction to functional neuroanatomy, cortical organization, and the various methods used by cognitive neuroscientists. These will be followed by lectures focusing on specific areas of cognitive functioning and related disorders (e.g., attention & neglect; memory & amnesia; language & aphasia, etc.). Case reports will be used to illustrate key points. Students will explore findings from cognitive, neuropsychology, and neuroscience studies to understand the relationships between brain, behaviour, and cognitive function.

**Program Learning Outcomes**

Upon completion of this course, students should be able to:

1. Demonstrate in-depth knowledge of the neural basis of behaviour.
2. Articulate trends in neuropsychology.
3. Express knowledge of the neural basis of behaviour in written form.
4. Describe and explain limits to generalizability of research findings in the neural basis of behaviour.
5. Demonstrate ability to relate information from neuropsychology to own and others' life experiences.

## Specific Learning Objectives

At the end of this course, students should have a thorough understanding of how cognitive, neuropsychology, and neuroscience research approaches and techniques are combined to investigate mind/brain relationships from a cognitive neuroscience perspective. Students should also be able to demonstrate in-depth knowledge of the neurocognitive processes, structures, and functional networks associated with a broad range of human perceptual and higher-level cognitive abilities, as well as disorders of perception and cognition.

## Required Text

- Gazzaniga, M. G., Ivry, R. B., & Mangun, G. R. (2014). *Cognitive neuroscience: the biology of the mind*. New York: W. W. Norton & Company, Inc.

## Course Requirements and Assessment:

Assessment	Date of Evaluation	Weighting
Midterm Test	October 23	35%
Term Paper	December 4 (Due at the beginning of class)	20%
Final Exam	During Exam Period (TBD)	45%
Total		100%

## Description of Assignments

Details regarding the midterm test, term paper assignment, and final exam will be discussed during lectures.

## Grading as per Senate Policy

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, B = 6, C+ = 5, etc.). Assignments and tests\* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, B = 70 to 74, etc.)

(For a full description of York grading system see the York University Undergraduate Calendar - [Grading Scheme for 2017-18](#))

## Missed Test, Exam, Term Paper Deadline

Students with a legitimate reason for missing a course test/exam (e.g., illness, compassionate grounds, etc.) which is **confirmed by supporting documentation**, may request accommodation from the Course Instructor. Further extensions or accommodation will require a formal petition to the Faculty. Late term papers will not be accepted under any circumstances.

Students must email the instructor in advance of any missed test/exam if at all possible; otherwise, **within 24 hours afterward**.

Appropriate documentation (See A, B below) verifying the circumstances for the missed test/exam must be provided to the instructor within **one week** (7 calendar days). Failure to provide appropriate documentation will result in a grade of 0.

A. Medical reasons for missing a test/exam must be supported by an **Attending Physician's Statement**, which can be downloaded at the following link:

<http://myacademicrecord.students.yorku.ca/pdf/attending-physicians-statement.pdf>

**NOTE:** The instructor and/or psychology undergraduate office will verify all medical notes. Falsification of any documentation relating to a missed test/exam is a serious academic offence (see "Academic Policies" below).

B. Non-medical reasons for missing a test/exam must be supported by appropriate documentation (e.g., copy of a death certificate, traffic accident report, etc.) Pre-booked travel is not a legitimate excuse for missing a test/exam.

In the case of a missed test that is justified as per A or B above, the grade component will be redistributed to the final exam.

### Important New Information Regarding Missed Tests

For any missed tests/exams, students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office.

[HH PSYC: Missed Tests/Exams Form](#). Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the test/assignment.

### Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2018-19 - Important Dates](#)

	<b>FALL (F)</b>	<b>YEAR (Y)</b>	<b>WINTER (W)</b>
Last date to add a course <b>without permission</b> of instructor (also see Financial Deadlines)	Sept. 18	Sept. 18	Jan. 16
Last date to add a course <b>with permission</b> of instructor (also see Financial Deadlines)	Oct. 2	Oct. 23	Jan. 30
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 9	Feb. 8	March 8
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	Nov. 10 - Dec. 4	Feb. 9 - Apr. 3	March 9 - Apr. 3

**\*Note:** You may withdraw from a course using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as "W". The withdrawal will not affect your grade point average or count towards the credits required for your degree.

### Electronic Device Policy

Use of electronic devices for non-course-related activity is not permitted.

### Attendance Policy

Succeeding in the course will require attending all classes. It is the student's responsibility to show up on time and be prepared for every class, having read the assigned readings for the week.

## **Academic Integrity for Students**

York University takes academic integrity very seriously; please familiarize yourself with [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity information [SPARK Academic Integrity modules](#). These modules explain principles of academic honesty.

### **Test Banks**

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

### **Electronic Devices During a Test/Examination**

Electronic devices of any kind are not allowed during a test or exam. Students are required to turn off and secure any electronic device in their bag which is to be placed under the chair while a test/exam is in progress. Any student observed with an electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of Academic Honesty.

### **Academic Accommodation for Students with Disabilities**

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The [York University Accessibility Hub](#) is your online stop for accessibility on campus. The [Accessibility Hub](#) provides tools, assistance and resources. Policy Statement.

**Policy:** York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

For Further Information please refer to: [York university academic accommodation for students with disabilities policy](#).

### **Course Materials Copyright Information**

These course materials are designed for use as part of the PSYC 3250 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#)

<b>COURSE SCHEDULE</b>		
<b>DATE:</b>	<b>TOPIC:</b>	<b>READINGS:</b>
September 11, 2018	<b>1)</b> Introduction to studying the neural basis of behaviour (History, Approaches & Methods)	• Chapter 1: pp. 2-21
September 18, 2018	<b>2)</b> Brain Structure & Function (Introduction to Basic Neuroanatomy)	• Chapter 2: 22-69
September 25, 2018	<b>3)</b> Brain Structure & Function (Introduction to Neuroimaging)	• Chapter 3: pp. 70-119
October 2, 2018	<b>4)</b> Visual Perception (Visual Deficits)	• Chapter 5: pp. 184-207
<b>October 9, 2018</b>	<b>**FALL READING WEEK - NO CLASS**</b>	• <b>(No readings assigned)</b>
October 16, 2018	<b>5)</b> Object & Face Perception (Agnosias)	• Chapter 6: pp. 218-271
<b>October 23, 2018</b>	<b>**MIDTERM TEST** (2 hours)</b>	<b>All prior readings</b>
<b>October 30, 2018</b>	<b>6)</b> Memory & Spatial Cognition (Amnesic Syndromes) <b>**TERM-PAPER TUTORIAL**</b>	• Chapter 9: pp. 378-423
November 6, 2018	<b>7)</b> Language & Reading (Aphasic Syndromes)	• Chapter 11: pp. 468-505
<b>November 13, 2018</b>	<b>**CLASS CANCELLED**</b>	• <b>(No readings assigned)</b>
November 20, 2018	<b>8)</b> Attention & Awareness (Neglect Syndromes)	• Chapter 7: pp. 272-325
November 27, 2018	<b>9)</b> Cognitive Control (Frontal Lobe Syndromes)	• Chapter 12: pp. 506-557
<b>December 4, 2018</b>	<b>10)</b> Neurocognitive Aging (Dementias)	<b>**TERM PAPER DUE** (No readings assigned)</b>
<b>TBD (Dec. 6-21, 2018)</b>	<b>**FINAL EXAM**</b>	<b>All readings since Midterm Test</b>

**\*\*IMPORTANT DATES\*\***