

HUMAN NEUROPSYCHOLOGY (PSYCH 445/2 SEC. 01) - COURSE SYLLABUS AUTUMN TERM 2016-17; MONDAYS & WEDNESDAYS, 8:45 - 10:00 AM

Instructor: Dr. Natalie. Phillips, Professor, Department of Psychology
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office hours: Monday, 10:00 - 11:00 am, or by appointment
Please come see me in person when you have questions pertaining to the course.

Class Location: Loyola Campus, Room SP-157

From the University calendar:

PSYC 445 Human Neuropsychology (3 credits)

Prerequisite: PSYC 310, 315, 355. This course is a general introduction to human neuropsychology.

Topics discussed include principles of brain organizations and function, human neuroimaging and recording techniques, the contribution of clinical patients and single case studies, selected neurological disorders, and cognitive neuroscience. Emphasis is on how these issues can be meaningfully related to human behaviour, emotion, sensory perception, and higher cognitive processes.

NOTE: Students who have received credit for PSYC 359 may not take this course for credit.

Objectives:

In this course, we will explore how the neural organization of the brain influences the way people think, feel, and act. You will develop an understanding of the brain's role in producing and mediating human behaviour, from sensory perception to complex thought. After successful completion of this course you will have:

- developed a basic knowledge of fundamental human neuroanatomy
- learned the contributions of the major brain areas to producing complex human behaviour and cognition
- learned current neuropsychological theories of human perception, behaviour, and cognition
- gained exposure to modern neuroimaging techniques
- developed a critical appreciation of neuropsychological methods of investigation and their limitations (case studies of brain injured patients; neuroimaging, etc.)

Course Materials:

- **required text:** M.T. Banich and R.J. Compton (2011). *Cognitive Neuroscience (3rd ed.)*, Wadsworth.

Note: a copy of the text is on reserve at the Vanier Library.

This is available through the university bookstore and also at:

http://www.coursesmart.com/9780840032980?__professorview=fals&__instructor=3154201

- **strongly recommended:** Lecture notes will be available on the day of the lecture from the Moodle course website accessible through "My Portal" on the Concordia main page.

The notes provide the skeleton organization of the lectures and should be printed to facilitate *your* note-taking. I reserve the right to deviate from the lecture notes. Please note: you will not do well in this course if you do not attend the lectures.



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Grading:

Your total grade will be based on your performance on the following course components:

- Exam 1 - Wednesday, October 14 30 or 35 %
- Exam 2 - during exam period 30 or 35 %
- Paper: Neuropsychology in the News
Due: Wednesday November 4th 25 %
- Five in-class quizzes throughout the term 10 %
- Total:** **100 %**

Your two exams will be differentially weighted so that the exam on which you performed better will contribute 35% to your final grade and the exam on which you performed more poorly will contribute 30% to your final grade.

Participation Pool Credits: One of the best ways to learn about research is to participate, and in particular, there are special benefits for quantification students because participation will give you a chance to see how the concepts of this course are applied in actual research projects that are being carried out at Concordia University. Furthermore, if you choose to continue on in Psychology, you may one day be carrying out your own research as part of an undergraduate honours thesis, research internship, or research project. Consequently, you may enjoy talking to more senior students in the Psychology program, either upper year undergraduate students, graduate students, or research interns/assistants.

The department has a participant pool that offers credit for participation in research being conducted in the department. You can find details about the participant pool through the website:

<https://concordia.sona-systems.com>

You can earn one participation credit for each hour (approximately) of research participation for lab-based studies, and 0.5 credits for each hour of online studies. Each participation credit is worth 0.5% towards your final grade. In this course you will be allowed to earn up to 6 participation credits. This means that you can earn up to 3% bonus marks through participation. Please note that participation is completely voluntary and your final grade will not be affected if you do not participate.

There will be no supplemental exam or paper. Exams will be a combination of multiple choice, short-answer, and essay questions. You will significantly improve your understanding of the material and preparation for the exams by completing in-class quizzes. These are designed to be a learning aid and to provide a quick assessment of your grasp of key issues.

Medical illness (which must be substantiated by a medical certificate) will be the only permissible reason for missing an exam. There is a high probability that make-up exams will be essay/long-answer format.

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Paper: Neuropsychology in the News

Research findings are routinely reported in the popular media. But, how accurately does the media portray research related to our field? This assignment will involve reading a report in the media that describes two research articles published in scientific journals that are pertinent to neuropsychology or cognitive neuroscience. You must read the scientific articles and media articles and prepare a **5 page maximum paper** (12 point font, double-spaced, typed), consisting of the following:

- 1) a summary of the research articles, providing a brief theoretical background, and describing the goals and hypotheses of the study, the methods (including participants and independent and dependent variables), and the major results and conclusions (approx. 3 to 3 ½ pages for the two articles together);
- 2) comment on the strengths and limitations of the research (approx. ½ to 1 page);
- 3) comment on the extent to which the research studies are adequately reflected in the media article (approx. ½ page).

The articles will be posted on the Moodle website.

You may find the follow tips on how to write a summary paper to be helpful:

<http://www.wikihow.com/Summarize-an-Article>

Due Date: Wednesday November 4th, (in class).

N.B.: 10% will be deducted from your final grade for each day the assignment is late.

In-class quizzes

There will be five to six in-class quizzes administered at the end of certain lectures, scheduled throughout the term and without advance notice. Your grade will be based on the successful completion of five of these quizzes (i.e., each quiz will be worth 2 points each, to a maximum of 10 points in total; worth 10P% of your grade). If you make any reasonable attempt to answer the questions, you will get at least one point, even if you are not correct. If you get more than 50% of the quiz correct, you will earn the full 2 points. Note that there will be *no* make-up quizzes.

The quizzes will consist of mix of question types (e.g., fill-in-the-blank, multiple choice, diagram labeling, etc.). They are designed to: 1) assess your understanding of key lecture concepts, 2) give you a rough idea of what *some* exam questions might be like, and 3) reward you for attending class. Quizzes will be scored in class by another student and handed in to the instructor.

Rights and Responsibilities

Plagiarism: The most common offense under the Academic Code of Conduct is plagiarism which the Code defines as “the presentation of the work of another person as one’s own or without proper acknowledgement.”

This could be material copied word for word from books, journals, internet sites, professor’s course notes, etc. It could be material that is paraphrased but closely resembles the original source. It could be the work of a fellow student, for example, an answer on a quiz, data for a lab report, a paper or assignment completed by another student. It might be a paper purchased through one of the many available sources. Plagiarism does not refer to words alone - it can also refer to copying images, graphs, tables, and ideas. “Presentation” is not limited to written work. It also includes oral presentations, computer assignments and artistic works. Finally, if you translate the work of another person into French or English and do not cite the source, this is also plagiarism.

In Simple Words: *Do not copy, paraphrase, or translate anything from anywhere without saying where you obtained it!*

(Source: <http://www.concordia.ca/students/academic-integrity/plagiarism.html/>)

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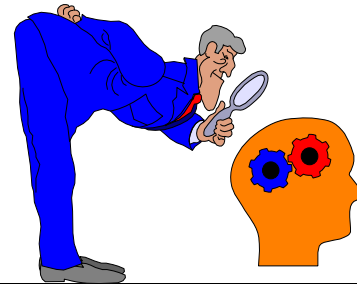
Grading System:

Grade Submitted	Range	GPA
A+	90-100	4.3
A	85-89	4.0
A-	80-84	3.7
B+	77-79	3.3
B	73-76	3.0
B-	70-72	2.7
C+	67-69	2.3
C	63-66	2.0
C-	60-62	1.7
D+	57-59	1.3
D	53-56	1.0
D-	50-52	0.7
F	0-49	Failure

HUMAN NEUROPSYCHOLOGY COURSE SYLLABUS (CON'T)

Lecture Schedule and Required Reading

Examinations will be based both on the lectures and the specified chapters from the Banich text. Please read the assigned material *prior* to its lecture(s); otherwise, you will find it difficult to keep up.



Date	Topic (schedule is subject to minor adjustments)	Chapter(s)
Sept. 7, 12	<ul style="list-style-type: none"> Course introduction: syllabus, schedule, grading, organization Introduction to human neuropsychology Organization of the CNS 	Chapter 1 (review Chapter 2)
Sept. 14	<ul style="list-style-type: none"> Neuropsychological models & techniques: limitations, brain lesions & behaviour, neuroimaging (CT, MRI, PET scans, ERPs) 	Chapter 3
Sept. 19, 21	TENTATIVE: Class tours of PERFORM neuroimaging suite.	
Sept. 26, 28	<ul style="list-style-type: none"> Organization and neuroanatomy of the CNS, continued 	
Oct. 3	<ul style="list-style-type: none"> Neuropsychological models & techniques: limitations, brain lesions & behaviour, neuroimaging (CT, MRI, PET scans, ERPs), continued 	
Oct. 5	<ul style="list-style-type: none"> Hemispheric specialization, cerebral asymmetry, and laterality 	Chapter 4
Oct. 10	No Class. Thanksgiving.	
Oct. 12, 17	<ul style="list-style-type: none"> Hemispheric specialization, cerebral asymmetry, and laterality (con't) 	
Oct. 19	Exam 1 (inclusive of material to Oct. 17; Chapters 1, 2, 3 4 + lectures)	
Oct. 24, 26, 31	<ul style="list-style-type: none"> Executive Function 	Chapter 11
Nov. 2	<ul style="list-style-type: none"> Discussion of Neuropsychology in the News articles 	
Nov. 7, 9, 14	<ul style="list-style-type: none"> Attention 	Chapter 12
Nov. 16, 21, 23, 28	<ul style="list-style-type: none"> Language <p>November 16th: Neuropsychology in the News assignment DUE</p>	Chapter 9
Nov. 30, Dec. 5, 6	<ul style="list-style-type: none"> Memory 	Chapter 10
	<p>FINAL EXAM (Non-cumulative; inclusive of material from Oct. 24 to Dec. 6) ** during December 7 to 21 , 2016 exam period **</p>	

Please note the other important dates in the Autumn 2016 Academic term:

Monday, Sept. 19

Deadline for withdrawal with tuition refund from autumn term courses.

Sunday, Nov. 6

Last day for academic withdrawal from autumn term courses (DISC).