# PSYCHOLOGY 207 - Section 002

# Contemporary Topics in Biological and Cognitive Psychology 3 credits

# University of British Columbia, Vancouver

Winter 2012 - Term II MWF 10:00 Buchanan A201

<u>Instructor</u>: Dr. Michael Souza ("sues-uh") <u>TA</u>: Sara Knauft

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Office Hours: \*Mondays 1:00 – 4:00PM Office Hours: Wednesdays 2:00-3:00PM

\*These office hours are for my PSYC 207, 309A and 365 courses **TA**: Marcus Watson

**E-mail:** marcusw@psych.ubc.ca **Undergraduate mentors:** Office: Kenny 3508

Melissa Hansen Telephone: ---

Rachel Degan Office Hours: Thursdays 2:00 – 3:00PM

# I. About your instructor, teaching assistants (TAs) and undergraduate mentors (UMs)











<u>Dr. Souza</u> is a faculty member in Psychology. He received his Ph.D. in Psychology from Berkeley. His interests revolve around higher-order cognitive functions, neurological injury and rehabilitation.

<u>Sara</u> (TA) is a graduate student in the Neuroscience Program. She received a B.A in Behavioral Neuroscience from Western Washington University. Her research is focused on the molecular and genetic mechanisms of learning and memory.

<u>Marcus</u> (TA) is a Cog Sci graduate student in the Department of Psychology. He received a Bachelor of Humanities from Carleton University in Ottawa and a M.A. in Philosophy from SFU. His research is primarily on *grapheme-colour synesthesia*.

<u>Melissa</u> (UM) is a 4<sup>th</sup>-year psychology major with interests in cognitive psychology, consciousness, and neurodegenerative diseases.

<u>Rachel</u> (UM) is a 3<sup>rd</sup>-year psychology major with interests in cognitive psychology, traumatic brain injury and neurodegenerative diseases.

#### About our undergraduate mentors:

The role of our undergraduate mentors is to provide you with an additional resource to succeed in this course. Melissa and Rachel will lead optional tutorial sections to prepare you for the exams (see last page of syllabus). They also offer a mentoring component for those of you interested in neuropsychology. Other content or course questions should be directed to the instructor and/or teaching assistants.

# II. Course description and goals

The topic of this course is "Exploring the Injured Brain." We will cover neuroanatomy, causes of brain injury (e.g., stroke, trauma), methods for assessing brain structure and function (e.g., behavior, neuroimaging), and a range of possible neurological impairments in the following domains: movement, perception and attention, memory, language, emotion, and executive functions. After successful completion of this course, you will be able to demonstrate more extensive knowledge about the brain, cognition and behavior.

# III. Required textbook and additional assigned readings

Kolb, B. & Whishaw, I.Q. (2009). Fundamentals of Human Neuropsychology (6<sup>th</sup> ed). New York: Worth.

\*I have not compared this edition to the previous ones and so I do not recommend using older editions.

Assigned journal articles (links to these articles will be posted on the Vista course website):

Batts, S. (2009). Brain lesions and their implications for criminal responsibility. Behav Sci Law, 27(2), 261-72.

Chen, A.J.-W., & D'Esposito, M. (2010). Traumatic brain injury: from bench to bedside to society. Neuron, 66, 11-4.

Tonks, J., Slater, A., Framptom, I., Wall, S.E., Williams, W.H. (2009). The development of emotion and empathy skills after childhood brain injury. *Dev Med Child Neurol*, 51(1), 8-16.

# IV. Course webpage

<u>http://vista.ubc.ca</u> (location for important announcements, lecture slides and grades)

# V. Course requirements

# Midterm Examinations I and II (27% for MT1 and 33% for MT2 = 60% of course grade)

Each midterm will consist of 40 multiple-choice questions and each question will have five options each. These questions may come in various formats, including (but not limited to) questions with diagrams and "all of the above" or "none of the above" options. There will be more of a focus from lecture versus the textbook but to perform well, you must have a clear understanding of both.

# Cumulative Final Examination (40% of course grade)

The Final will consist of 60-75 multiple-choice questions with five options each. These questions may come in various formats, including (but not limited to) questions with diagrams and "all of the above" or "none of the above" options. For the Final, every lecture is fair game but only readings after MT2 will be testable. There will be more of a focus from lecture versus the textbook but to perform well, you must have a clear understanding of both. Please note: the date of the final will not be announced until mid-February and so I strongly advise you NOT to plan travel until you learn the dates of your final exams. You cannot take the final on a different date/time unless you have a documented medical illness.

# VI. Research participation (optional extra credit opportunity)

In addition to your exam scores, you have the opportunity to earn up to three (3) extra percentage points on your overall final grade by participating in studies regularly conducted by the Psychology Department and coordinated through the human subject pool (HSP). This provides the valuable opportunity to observe the research process directly and to contribute to the ongoing research activities at UBC. The extra grades are obtained by signing up for the Introductory Psychology Subject Pool through their web site:

<a href="https://hsp.psych.ubc.ca/">https://hsp.psych.ubc.ca/</a>. Please note that any inquiries about credits should be directed to HSP or the experimenters that you worked with, \*not\* the instructor.

One percentage point is assigned to your final grade for each hour of participation and partial credits will be rounded <u>down</u> (i.e., 1.5 hours = 1% extra credit). Credits can be recorded and tracked via the subject credit

website. These credits are added to your grade at the end of the course. Make sure that you retain your portion of the experimental credit receipt in the event that verification of participation is required when the final grades are compiled. If you do not correctly assign your credits to this course, you will NOT receive credit so please make sure you have done this correctly.

As an alternative to participating in studies, you may choose to complete library writing projects, in which you read and summarize a research article; each article summary counts as one hour of research participation. You must select a research article (not a letter to the editor, commentary, or review paper) published between 2000-present in the journal *Psychological Science*. Each summary should be about 500 words and should include the purpose, method and results of the study. If you choose the library option, you must create an account on the online HSP system and follow the instructions provided at this link: <a href="http://www.psych.ubc.ca/hsp/Subject%20Pool%20Information%20For%20Participants.pdf">http://www.psych.ubc.ca/hsp/Subject%20Pool%20Information%20For%20Participants.pdf</a>.

Please note: no other extra credit opportunities are available for this course.

# VII. Course grading

Your final grade consists of the items described in Section V. Performance for each of the items above will be put into a calculator that outputs your final course percentage earned. As mentioned in Section VI, any extra credit earned will be added to this final score.

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the mean grade in a 200-level class is 67 for a good class, 65 for an average class, and 63 for a weak class, with a standard deviation of 14. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, your course percentage is converted according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
Α	85-89%	В	72-75%	C	60-63%	F	0-49%
A-	80-84%	B-	68-71%	C-	55-59%		

Remember, you are earning a degree at a highly reputable post-secondary institution. Therefore, criteria for success are high. The Faculty of Arts offers the following guidelines that broadly characterize the kind of work that is generally associated with the main grade ranges. These characteristics help to put the Psychology Department Grading Policies into context. Please note that adequate performance is in the C range, which is the typical class average.

A RANGE: Exceptional Performance. Strong evidence of original thinking; good organization in written work; capacity to analyze (i.e., break ideas down) and to synthesize (i.e., bring different ideas together in a coherent way); superior grasp of subject matter with sound critical evaluations; evidence of extensive knowledge base.

**B RANGE**: *Competent Performance*. Evidence of grasp of subject matter; some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.

**D-C RANGE:** Adequate Performance. Understanding of the subject matter; ability to develop solutions to simple problems in the material; acceptable but uninspired work; not seriously faulty but lacking style and vigor.

**F RANGE**: *Inadequate Performance*. Little or no evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the literature.

# VIII. Course policies

#### Class participation

Active learning is a critical component of a proper education and for that reason it will be frequently promoted during the term. You may be asked to answer questions at any point in class and you are expected to do your best. It is OK to not know the answer in this context but it is NOT acceptable to not try.

#### **Attendance and Powerpoint slides**

Attendance is expected for every class period. In the event you miss a lecture, it is strongly suggested that you get notes from a fellow classmate because the lecture slides alone will be insufficient. For your convenience, lecture slides will usually be posted by 10PM the evening before a lecture. They will be posted in PDF format in two versions only (2 slides and 6 slides per page). Instructional materials are only for the purpose of learning in this course and must not be distributed or used for any other reason.

### Reading the textbook

The textbook is designed to reinforce lecture concepts and to introduce pieces of information that were not discussed in lecture. In addition to questions covering lecture, the exams will also have questions exclusively from the textbook. Thus, superior performance on the exams will require a thorough reading and understanding of the textbook. Note: you should read the relevant book chapters *prior* to that class period.

# E-mail policy

In most cases, e-mails will be answered within 48 hours of receipt (not including weekends). If you send the instructor or teaching assistants an email, the email subject should include the course and nature of the inquiry (i.e., "PSYC 207 – Question about cranial nerves"). Emails that you send should contain no more than one question and you should try to explain your current understanding of the concept in the email (which will be affirmed or corrected).

<u>Dr. Souza, Sara and Marcus will **NOT** accept emails through Vista so please use our email addresses</u>. If you have more than one question, you should visit office hours. Please note that emails about test questions may not be answered the day before an exam so please plan accordingly.

#### Class discussion board on Vista

For your convenience, discussion threads will be created to improve information flow in our course. Logistical questions may be directed to the instructor on the 1<sup>st</sup> thread. Inquiries, requests for class notes or study partners *directed to fellow students* may be posted on a 2<sup>nd</sup> thread. Please note that you are NOT allowed to post class notes on the Vista discussion board. Finally, current research in psychology will be posted on a 3<sup>rd</sup> thread. Negative remarks on any of these discussion forums will not be tolerated and failure to respect this policy may result in your access to our course website being revoked.

# Syllabus changes

There may be minor changes to the syllabus during the term. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to properly prepare for an examination (e.g., reading two extra chapters the week of the midterm).

#### Office hours

You are strongly encouraged to visit office hours if you have questions or concerns about any of the material. If you cannot attend regularly scheduled office hours, you should send an email to try to make an

appointment for another time (please give at least 48 hours of notice). You may also come to office hours to ask about graduate school, research or other related questions. If we cannot answer your question(s) about topics beyond the course, we'll direct you to someone who can.

You will need to visit the TA's office hours to review your midterm exams, if you so choose. Please feel free to talk with Dr. Souza after reviewing your exam if you have any outstanding questions. Any grading disputes other than calculation errors for the midterms must be handled with Dr. Souza within three weeks of when the scores were released.

#### Classroom conduct

Our classroom is a place where you should always feel safe and respected. It is also a place that is conducive to learning and intellectual curiosity. Any behaviors compromising this environment will not be tolerated and the student(s) and/or individual(s) will be asked to leave.

#### Taking an examination

In my opinion, punctuality to lectures and exams is a sign of respect to your instructor, teaching assistants and fellow students. Tardy students should not ask the instructor or teaching assistant for what they missed from lecture because they can ask a fellow student. Furthermore, a student will not be allowed to write a midterm or the Final if (1) s/he is tardy 30 minutes or more, or (2) a student has already finished and submitted their exam, whichever occurs first. Students in this situation, or any other situation where they miss the exam for a reason of a non-medical nature, will not be allowed to write the exam and will receive a "o." Absolutely no exceptions will be made to these policies.

There will be no "in and out" privileges once you've started an exam (e.g., bathroom break) unless you have a documented medical reason for such a need. Medical documentation must be disclosed with Dr. Souza at least 24 hours prior to the exam.

When time is called at the end of the exam, you must immediately stop working and submit your exam materials. You will not be allowed more time for any reason, including (but not limited to): putting your name or ID on the exam or filling in or changing an answer. You must also remain completely silent until every exam has been collected. Failure to stop working when time is called or to stay silent until all exams have been collected will result in a 'o' on the exam. No exceptions will be made.

#### Missing a midterm or the Final

The midterms cannot be written at another time. You will not be accommodated for missing a midterm unless you have a valid doctor's note (which will be verified). Arts students should meet with an academic advisor from Arts within 48 hours of missing the exam (must provide relevant documentation). Non-Arts students should submit documentation directly to Dr. Souza (scanning and emailing it is acceptable). Final decisions regarding the acceptability of these materials are at the discretion of the instructor. Please note that you have not been officially excused from an examination until you have received an email from Dr. Souza indicating that is the case. If you have not received such an email after submitting a note, please contact him immediately to ensure that your note has been processed and accepted.

If you are excused from Midterm 1, that portion of the course grade will be evenly split between Midterm 2 and the Final. If you are excused from Midterm 2, that portion of the course grade will be added to the Final. If you are excused from both Midterm 1 and Midterm 2, you will be assigned a paper or project to make up for the portion of the grade corresponding to Midterm 2. In the case of the Final, provided that you have given Arts Advising or Dr. Souza (as appropriate) with the appropriate documentation, you may be scheduled to take the final at a standing deferred time (typically in August). Please note that make-ups for the Final may differ from the Final used for the rest of the class.

#### **Access and Diversity**

UBC is committed to equal opportunity in education for all students including those with documented physical or learning disabilities. If you believe you fall in this category, please visit this website (<a href="http://www.students.ubc.ca/access/disability-services/support-students/exam-accommodations/">http://www.students.ubc.ca/access/disability-services/support-students/exam-accommodations/</a>) to take the necessary steps to ensure that you have every opportunity that you deserve to excel here at UBC.

#### Grade bumps

When computing final grades, the instructor carefully analyzes every single student to determine whether a grade bump is deserved. Bumps may be awarded for consistent performance at a major grade boundary or for marked improvement from the midterm to the final (i.e., 10%+). Bumps are not guaranteed and are \*not\* awarded for non-academic reasons (i.e., student is graduating and/or involved in sports or other extracurricular activities). **DO NOT** send the instructor an email asking for a grade bump.

#### **Academic Misconduct**

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. Relevant to this course, the Department has implemented software that, can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. This will be used for every assessment we take in this course.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.

Do note that during exams, the instructor and invigilators reserve the right to move students in their seating arrangement with no explanation provided.

# IX. Links that you may find useful...

#### Helpful student information

UBC Academic Calendar

UBC Access and Diversity

Time management tips

http://www.alendar.ubc.ca/vancouver/academicyear.cfm
http://www.students.ubc.ca/access/index.cfm
http://www.arc.sbc.edu/time.html

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Tips to help overcome test anxiety <a href="http://www.swccd.edu/~asc/lrnglinks/test\_anxiety.html">http://www.swccd.edu/~asc/lrnglinks/test\_anxiety.html</a>

#### **UBC** Psych student organizations

Psi Chi (International Honors Society)
Psychology Students' Association
Undergraduate Research Journal

http://psa.psych.ubc.ca/
http://ubcujp.psych.ubc.ca/

Psyched! newsletter <a href="http://psanewsletter.wordpress.com/">http://psanewsletter.wordpress.com/</a>

# Psychology 207: Lecture and reading schedule

May be subject to minor revisions with advance notice from the instructor

<u>Lecture</u>	<u>Date</u>	<u>Day</u>	<u>Topic</u>	Assigned reading	
1	2-Jan	W	Course introduction	-	
2	4-Jan	F	History of neuropsychology	Ch. 1	
3	7-Jan	М			
4	9-Jan	W	The basics of neurotransmission and functional neuroanatomy	Ch. 3 (51-9; 61-74); Ch. 5 (118-21; 126-30)	
5	11-Jan	F	Tunctional neuroanatomy	Cii. 3 (113 21, 123 30)	
6	14-Jan	Μ	The neurological evem	Ch. 28	
7	16-Jan	W	The neurological exam	C11. 20	
8	18-Jan	F	Fundamentals of brain imaging	Ch. 6	
9	21-Jan	М	rundamentais of brain imaging	CII. 0	
10	23-Jan	W			
11	25-Jan	F	The dustingstional brain	Ch. 26 (748-65)	
12	28-Jan	Μ	The dysfunctional brain		
13	30-Jan	W			
14	1-Feb	F	Midterm Examination I	Lectures + readings: 2-13	
15	4-Feb	Μ		Ch. 9 (223-8);	
16	6-Feb	W	Movement	Ch. 26 (765-8; 786-96)	
17	8-Feb	F		20 (705 0, 700 50)	
18	11-Feb	М	NO CLASS - Family Day		
19	13-Feb	W	Perception and attention	Ch. 13 (355-60; 363-73);	
20	15-Feb	F	rereption and attention	Ch. 14 (379-87; 389-93)	
21-23	18-22 Feb	М	NO CLASS - Spring Break	-	
24	25-Feb	Μ	Memory	Ch. 18 (487-99; 507-18);	
25	27-Feb	W	Dementia (with Jennifer Ferris)	Ch. 27 (796-803)	
26	1-Mar	F	Language	Ch. 19 (536-53);	
27	4-Mar	М		Ch. 14 (393)	
28	6-Mar	W	Emotion	Ch. 20 (557-71; 580-5);	
29	8-Mar	F		Tonks et al. (2009)	
30	11-Mar	М	Executive functions	Ch. 16	
31	13-Mar	W			
32	15-Mar	F	Midterm Examination II	Lectures + readings: 15-31	
33	18-Mar	М	Hemispheric asymmetries	Ch. 11 (281-303)	
34	20-Mar	W			
35	22-Mar	F	Consciousness	-	
36	25-Mar	М	Brain plasticity and recovery of function	Ch. 25 (720-2; 727-43);	
37	27-Mar	W		Chen & D'Esposito (2010)	
38	29-Mar	F	NO CLASS - Good Friday	-	
39	1-Apr	M	NO CLASS - Easter Monday	(2000)	
40	3-Apr	W	Neuroethics	Batts (2009)	
41	5-Apr	F	In-class review session; course conclusion	-	
-	TBA	-	*Optional* Q&A review session		
-	TBA	-	*Cumulative* Final Examination	All lectures + post-MT2 readings	

# Psychology 207: \*optional\* tutorial sections

Sign-ups for these sections will be posted on our Vista discussion board

<u>Section</u>	Week of	<u>Times</u>	Topics covered	Review lectures					
Beginning of Midterm 1 material									
			History						
1	Jan 14- 18	TBA	Cellular and gross neuroanatomy	Lectures 2-6					
			Cranial nerves						
-			71 (2.05)						
2	Jan 28- Feb 1	ТВА	The mental status exam (MSE)	Lectures 7-11					
2			Brain imaging techniques Stroke and traumatic brain injury (TBI)	Lectures 7-11					
			Stroke and traumatic brain injury (151)						
Beginning of Midterm 2 material									
	Feb 25- Mar 1	TBA	Movement	Lectures 15-17;					
3			Perception and attention	19-20; 24					
-			Memory (part I)	·					
			Memory (part II)						
4	Mar 11-	ТВА	Language	Lectures 25-29					
	15			Lectures 23-29					
			Emotion						
Beginning of Final Exam material*									
	Mar 25- 29	ТВА	Hemispheric asymmetries	_					
5			Consciousness	Lectures 33-36					
			Recovery of function						

## Please note:

We will try to offer sections on different days/times to maximize availability for students

Sections will cover <u>lecture material only</u>. Please direct textbook questions to your instructor or teaching assistants.

<sup>\*</sup>The Final Exam is cumulative and thus covers all lectures