

## Syllabus for Psyc 375 (001) – Fall 2017

**Instructor:** Dr Craig McDonald  
**Class time:** TR 12:00-1:15 pm  
**Class location:** Music/Theater 1007  
**Office hours:** T 1:30-2:30 pm & by appt.

**E-mail address:** cmcdona3@gmu.edu  
(email is the best way to reach me)  
**Office phone #:** 703-993-2277  
**Office location:** DK 2057

**Recommended Text:** Bear et al. (2015) Neuroscience: exploring the brain, 4<sup>rd</sup> Ed., Lippincott Williams & Wilkins: Baltimore, MD  
<http://www.campusstores.com/gmu/index.asp>

**Deadlines:** Last day to add – September 5; Last day to drop – September 29

### Goals and course description:

- Introduce the fundamentals of neuroscience, including the electrical properties of neurons, synaptic transmission and the structure of the nervous system
- Provide an overview of the neural underpinnings of the senses

### Assignments:

There will be four exams. Each will include multiple choice and/or short essay questions based on the lecture material. All exams carry equal weight and the three highest grades will be counted toward your final grade in the course (i.e. you can drop one exam). **There will be no make-up exams.**

Classes may be cancelled by the University or Instructor (via email). In the event of a cancelled class, the instructor will either try to make up the material during other class meetings, or provide a supplementary assignment/video.

### Grading:

Exams	33.33% each (33.33x3 = 100%)
Letter Grades	A (90-100%), A- (85-89%), B+ (80-84%), B (75-79%), B- (70-74%), C+ (65-69%), C (60-64%), C- (55-59%), D (50-54%), F (below 50%)

### Technology:

Lectures will be in PowerPoint format and will be available on Blackboard

### Special needs:

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

### Honor code:

Students are reminded of the university honor code and are expected to adhere to the principles thereof.

**Official Communications via GMU E-mail:** Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their mason e-mail account, and are required to activate that account and check it regularly.

## Tentative Schedule

Date	Reading	Topic
Aug 29	-	Introduction
Aug 31	Chapter 1	Historical perspective
Sept 5	Chapter 2	Neurons and Glia
Sept 7	Chapter 3	Membrane potential
Sept 12	Chapter 4	Action potential
Sept 14	Chapter 5	Synaptic transmission 1
Sept 19	Chapter 5-6	Synaptic transmission 2
Sept 21	Exam 1	
Sept 26	Chapter 7	Structure of the nervous system
Sept 28	Chapter 8	Chemical senses
Oct 3	Chapter 9	The Eye
Oct 5	Guest Lecture	Perceptual Decision-making
Oct 10	No class	Columbus Day
Oct 12	Chapter 9	Retinal circuits 1
Oct 17	Chapter 9	Retinal circuits 2
Oct 19	Chapter 10	Cortical processing
Oct 24	Chapter 21	Attention and Consciousness 1
Oct 26	Chapter 21, selected readings	Attention and Consciousness 2
Oct 31	Exam 2	
Nov 2	Chapter 11	Audition
Nov 7	Chapter 12	Somatosensory system 1
Nov 9	Chapter 12	Somatosensory system 2
Nov 14	No Class	SfN Conference
Nov 16	No Class	SfN Conference
Nov 21	Selected Readings	Cortical Plasticity
Nov 23	No class	Thanksgiving
Nov 28	Selected Readings	TBD
Nov 30	Exam 3	
Dec 5	Selected readings	Case study
Dec 7	Review for final exam	

Dec 14	<i>FINAL EXAM 10:30 am-1:15 pm</i>	
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**NOTE:** You are responsible for all announcements and any syllabus modifications made in class each week whether you are present or not.