

## **SYLLABUS for FUNCTIONAL ORGANIZATION OF THE HUMAN NERVOUS SYSTEM** **Spring 2018**

NROSCI 1032 (1020), 28233, SPRING TERM, 2018  
MW 11:00 AM - 12:15 PM, A202 Langley Hall

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Office hours: by appointment

### **Course description**

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In Functional Organization of the Human Nervous System, students will investigate a number of neurological disorders, including those that affect movement, memory, cognition, and vision, as well as the effects of stroke and epilepsy. We will explore the history, symptoms, and, to the extent they are known, the mechanistic bases of these disorders. Additionally, we will discuss methods used to diagnose these disorders and current treatments (if any). The format of the course involves lectures, student projects, exams, and exploration of neurology case studies, presented using case-based learning techniques.

### **Course materials**

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Materials for the course (e.g. readings, slides) will be posted on the CourseWeb site for this class, which can be found at <https://courseweb.pitt.edu>. There is no required textbook for this course. CourseWeb will be used to post course announcements, as needed. Important announcements may also be sent to your university email account ([name@pitt.edu](mailto:name@pitt.edu)). *Announcements, information, course changes, and documents posted to CourseWeb are REQUIRED content for the course (unless you are told otherwise) so please check the CourseWeb page often.* Any official email communications regarding this course will be delivered to students' University of Pittsburgh email address, in accordance with the University of Pittsburgh email communication policy: <http://www.bc.pitt.edu/policies/policy/09/09-10-01.html>. Students who wish to forward their Pitt email to another account do so at their own risk.

### **Course prerequisites**

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**NROSCI 1000** (*Introduction to Neuroscience*) and **NROSCI 1011** (*Functional Neuroanatomy*) are prerequisites for this course. I recommend against taking this course concurrently with NROSCI 1011. If you do not have these prerequisites, I encourage you to speak with me about whether the class will be appropriate for you to take at this time.

### **Office appointments**

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Prior experience has demonstrated that scheduled office hours do not work well in this course. However, I am more than happy to meet with you to address any questions you have regarding the material covered in lectures or projects. Simply send me an email that contains a few times that are best for you to meet and I will get back to you to find a time that works for both of us.

I cannot guarantee I will have time to meet if contacted with less than a 48 hour notice, especially in the week or so prior to an exam.

## Course Grades

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Your semester grade will be based on three in-term exams (see detail below; 25% of grade for each exam), a short research project on an assigned topic related to the class material (12.5% of grade), and the creation of a case study, which will be presented to the class (12.5% of grade). The research project will be done by pairs of students, and will involve a short paper and a 10-minute presentation to the class. Case studies will be developed in groups. Course grades will be determined based on the following ranges:

A+	97-100%	B+	87-89%	C+	77-79%	D+	67-69%	F	< 60%
A	93-96%	B	83-86%	C	73-76%	D	63-66%		
A-	90-92%	B-	80-82%	C-	70-72%	D-	60-62%		

Borderline grade decisions will be influenced by participation in class discussions, continued improvement on exam scores, *etc.*

## Exams

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There will be three in-class exams, one for each block. The format for these exams will be essay and short-answer questions, the content of which will be based on the lectures in the block for a given exam. The exams will not be cumulative, *per se*, except for the fact that elements of the class will, by necessity, carry over from topic to topic to a certain degree. There will be no final exam for this course. ***No exams may be dropped.*** Note that exams may be reviewed by students only up to the time the next exam is given. After that point, previous exams will no longer be available.

**You are expected to take each examination and do your student presentations on their scheduled dates/times.** If unanticipated circumstances (*e.g.*, illness, death in the family) make it impossible for you to take an examination or give a presentation, **you must** contact me **BEFORE** to the scheduled date to make other arrangements. It is preferable that you speak with me directly but, at a minimum, you must send me an email ([fanselow@pitt.edu](mailto:fanselow@pitt.edu)) and/or leave a message on my office phone (412-383-6051) before the examination or presentation. Also, the circumstances that prevent you from being present must be documented (*e.g.*, letter from physician, obituary). I understand that some of you may miss an exam due to interviews for graduate, medical, or other professional schools. If this is the case, you should make arrangements with me at least one week prior to your planned date(s) of absence so we can find a time for you to take the exam or give your presentation, either before you leave or after you return. You will receive a zero for the examination or presentation if you do not follow these policies. **There will be no exceptions.**

## Student research project

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Pairs of students will be assigned a topic on which to do a short research project, which will include writing their findings up as a study guide for the rest of the class to use and a 10-minute presentation to the class. Project topics are selected to complement lecture and case study material, so will be presented during their relevant block (see presentation dates on course schedule at the end of the

syllabus). Topics will be assigned at random to pairs of students. An emphasis for the presentations, in addition to the content, is to give students practice in preparing and delivering a short, well-polished presentation. I will give instructions/tips on this process, as well as expectations for the paper and the presentation early in the term.

### **Case study development**

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During block 3, small groups of students will develop a case study to present to the class. Details for this project will be given during the course.

### **Academic policies**

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#### **Academic Integrity:**

Students in this course will be expected to comply with the [University of Pittsburgh's Policy on Academic Integrity](#). Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

#### **Disability Services:**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and [Disability Resources and Services](#) (DRS), 140 William Pitt Union, (412) 648-7890, [drsrecep@pitt.edu](mailto:drsrecep@pitt.edu), (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

#### **Accessibility:**

Blackboard is ADA Compliant and has fully implemented the final accessibility standards for electronic and information technology covered by Section 508 of the Rehabilitation Act Amendments of 1998. Please note that, due to the flexibility provided in this product, it is possible for some material to inadvertently fall outside of these guidelines.

#### **Copyright Notice:**

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#### **Statement on Classroom Recording and Photographs:**

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use. This includes audio recordings, video recordings, photographs, and similar.

## Functional Organization of the Human Nervous System 2018S Lecture, Presentation, and Exam Schedule

Date	Topic
<b>Block 1 - Movement disorders</b>	
8-Jan	Course introduction
10-Jan	Motor system overview
15-Jan	<b>M.L.K Day: NO CLASS</b>
17-Jan	Case set A: movement disorders
22-Jan	Movement disorders lecture
24-Jan	Parkinson's disease
29-Jan	Spinal cord lecture and Case set B: spinal cord
31-Jan	Movement disorders treatment group presentations, day 1
5-Feb	Movement disorders treatment group presentations, day 2
7-Feb	<b>EXAM 1</b>
<b>Block 2 - Localization of function</b>	
12-Feb	Introduction to localization of function
14-Feb	Imaging modality group presentations
19-Feb	Aphasia
21-Feb	Memory
26-Feb	Alzheimer's disease
28-Feb	Vasculature, stroke
	<b>Spring Break: NO CLASS</b>
12-Mar	TBI, CTE
14-Mar	Migraine
19-Mar	Frontal cortex function
21-Mar	<b>EXAM 2</b>
<b>Block 3 - Higher-level brain functions</b>	
26-Mar	Case set C: visual system
28-Mar	Visual system lecture
2-Apr	Case study project presentations, day 1
4-Apr	Case study project presentations, day 2
9-Apr	Prion diseases
11-Apr	Epilepsy lecture 1
16-Apr	Epilepsy lecture 2
18-Apr	<b>EXAM 3</b>