

IDIS 125 BRAIN: Introduction to Neuroscience Spring 2018

Meets: 14:00-14:50 MWF in Centennial 2704
Lab Sections are in Phillips 309
311: M, 16:00-17:50
312: M, 18:00-19:50

Instructor: Daniel Janik; Office: Phillips 185, Phone: 36-5023; janikds@uwec.edu
Office Hours: WF 10:00-11:50

Text: *The Mind's Machine*. 2nd edition. Neil V. Watson and S. Marc Breedlove. 2015. Sinauer Associates, Sunderland, MA.

Recommended Software: Brain Pro for Mac OS/iOS (\$10); Brain Tutor 3D for MacOS, Windows. (<http://www.brainvoyager.com/downloads/downloads.html>) Brain Tutor for Android (Google Play)

Overview

This course is intended for both science and non-science majors as an introduction to the field of neuroscience. In addition to standard content information about the field, students will be introduced to some of the methods and ways of knowing in the field. Throughout the course emphasis will be placed on the importance of understanding how brain function is central to almost everything Ido in day-to-day life.

GRADES

Item	% of Total Grade
Exams (17.5% each)	70
Lab	30
Quiz 1 (10%)	
Quiz 2 (10%)	
GSR Write-up (10%)	
Total	100

Course grades will be assigned as follows: A (93-100); A- (90-92.9); B+ (87.5-89.9); B (83-87.4); B- (80-82.9); C+ (77.5- 79.9); C (73-77.5); C- (70-72.9); D+ (67.5-69.9); D (63-67.4); D- (60-62.9); F < 60.

The lower limits of these ranges may be lowered depending on overall class performance, but they will not be raised. Therefore, for example, if you score 90%, you are assured at least an A-.

HABITS FOR SUCCESS IN THIS COURSE

1. Study a minimum of 6 hours every week and even more the week before the exam.
2. Make efficient use of your study time. Avoid distractions such as television, socializing, etc.
3. Skim text readings before class and read text thoroughly after class.
4. Go over your notes (for the first time) within 24 hr after lecture.
5. Construct concept maps of the topics.
6. Use mental imagery to visualize processes and things.
7. Come to lecture every day. Come well rested, alert and prepared to think.

EXPECTATIONS AND POLICIES

- I expect you to come to class prepared, to participate in class activities, to take responsibility for your learning and to act in a respectful, professional and responsible manner. In turn, you can expect the same from me. I can also help connect you with University resources, including academic and non-academic support services. The Academic Skills Center, Old Library 2112 <http://www.uwec.edu/asc/index.htm> can assist you with the writing assignments.
- **Disabilities Statement.** Any student who has a disability and is in need of classroom accommodations, please contact us and the *Services for Students with Disabilities Office* in Centennial Hall 2106 at the beginning of the semester. All discussions will remain confidential.
- **Diversity:** It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that I can make arrangements for you.
- **Inclusivity:** I adhere to the philosophy that all community members should enjoy an environment free of any form of harassment, sexual misconduct, discrimination, or intimate partner violence. If you have been the victim of sexual misconduct, I encourage you to report this. If you report this to a faculty/staff member, they must notify our college's Title IX coordinator about the basic facts of the incident (you may choose to request confidentiality from the University). If you encounter sexual harassment, sexual misconduct, sexual assault, or discrimination based on race, color, religion, age, national origin, ancestry, sex, sexual orientation, gender identity, or disability please contact the Title IX Coordinator, Teresa O'Halloran, at ohallote@uwec.edu.
- **Attendance** is mandatory, following University regulations. Students should communicate directly with faculty regarding such absences. Attendance will be checked at all lab periods and you will be docked 1 percentage point for a missed lab unless the absence is "authorized" (see examples of authorized absences at <http://www.uwec.edu/DOS/policies/attendance.htm>).
- All assignments are due on the date requested unless you have an authorized absence or our prior consent. **Late assignments** are accepted but get docked 5% for each day following the due date.
- Please do not ask for a make up exam or an extension on an assignment unless your reason for doing so is consistent with the University's **authorized absence policy**. Your request will not be granted. The main idea is that your reason for missing the regularly-scheduled exam or assignment needs to be something outside of your control that happens *at the time of the exam*. For example, being sick (or on a field trip) the week before the exam and not having had enough time to study during that period, is not a valid reason. Another example of an unauthorized absence is if you or a family member have made travel arrangements that will take you away from campus on a class or exam day.
- **Academic integrity.** I expect students to adhere to UWEC policies for academic honesty. I consider any academic misconduct in this course as a serious offense, and I will pursue the strongest possible academic penalties for such behavior. The disciplinary procedures and penalties for academic misconduct are described on the UWEC Dean of Students website (<http://www.uwec.edu/DOS/policies/academic/index.htm>).
- The deadline for **dropping** this course with no record is February 9, 2018. The deadline for **withdrawing** with a grade of "W" is April 13, 2018.
- I do not consent to having notes from our class uploaded to the internet, including commercial note-selling websites such as StudySoup. Some companies target students and solicit course material acting as if they are working in coordination with colleges and universities, but that is not true for this class. This means that you do not have the right to provide your notes to anyone who is not enrolled in this course or to make any commercial use of them without express prior permission from us. Unless you are a qualified disabled student, you do not have the right to record our lectures. Inappropriate use of notes may be in violation of the Blugold Conduct Code and sanctions will be pursued accordingly.
- Check your UWEC **e-mail** regularly. I use email to relay important announcements regarding the course.

Schedule - Spring 2017

I intend to keep to the schedule shown below. However, it should be considered tentative. I reserve the right to change the sequence or nature of the topics.

Week	Reading Pages*	Lecture Topic	Lab/Discussion Topic
1 Jan 29-Feb 2	Ch 1(all) 30-47	M: Intro to the field of Neuroscience - history, current questions and approaches W: Major features of vertebrate nervous systems F: Evolution and the brain	Anatomy I: Models and preserved specimens
2 Feb 5 -Feb 9	A1-A3; 57-67 in Mol Biol Primer (on D2L)	M: Cells W: DNA and Inheritance F: Protein Synthesis/Protein Function	Review of Week 1 anatomy; Body Image
3 Feb 12-Feb 16	20-29 50-57 57-61	M: Neurons and Glia W: Electrical Signaling 1 F: Electrical Signaling 2	Anatomy Review
4 Feb 19-Feb 23	61-68 78-87 88-101	M: Chemical signaling W: Neurotransmitters F: Drugs 1	Anatomy Quiz
5 Feb 26-Mar 2	88-101 112-117	M: Drugs 2 W: EXAM 1 F: Sensation and Perception	Review
6 Mar 5-Mar 9	174-186 186-195 202-205	M: Vision 1 W: Vision 2 F: Vision 3	Sensory I: Vision
7 Mar 12-Mar 16	146-153 153-161 117-121, 127-133	M: Hearing W: Hearing F: Touch/ Control of Movement 1	Sensory II: Hearing and vestibular senses
Mar 19-Mar 23		Spring Break	
8 Mar 26-Mar 30	134-139 139-142	M: Control of Voluntary Movement 2 W: Control of Voluntary Movement 3 F: TBA	Sensory Quiz
9 Apr 2-Apr 6	30-34, 330-331 208-217	M: Autonomic Motor System W: EXAM 2 F: Hormones	Review
10 Apr 9-Apr 13	217-223 331-335 310-326	M: Hypothalamus and Neuroendocrine Reg. W: Stress F: Emotions	GSR

Schedule (cont.)

Week	Dates/Reading*	Lecture Topic	Lab/Discussion Topic
11 Apr 16-Apr 20	264-275 278-285 288-307	M: Control of Eating W: Circadian Rhythms F: Sleeping and Dreaming	GSR
12 Apr 23-Apr 27	395-400 401-404	M: Development 1 W: <u>EXAM 3</u> F: Development 2	Review
13 Apr 30-May 4	368-382 382-393 136; 466-470	M: Memory and Learning 1 W: Memory and Learning 2 F: Plasticity	GSR Data Analysis
14 May 7-May 11	352-365 43; 404-406	M: Brain-Based Disorders W: Brain-Based Disorders F: <u>EXAM 4</u>	Review

*Chapter readings from Watson and Breedlove, *"The Mind's Machine"*. Where chapters are shown more than once, that indicates that parts of that chapter are related to more than one course topic.

Student Information

Name_____

Lab Section: M 4:00 M 6:00
(circle one)

Preferred First Name_____

Year in College_____

Hometown_____

College Biology and Psychology Courses Taken:

Career/ Education Plans After College:

Reason For Taking This Course: