

SYLLABUS

Behavioral Chemistry PSYC559 / NEUR461, Section 001, Spring 2024 MW: 12:00-1:15 AM_Innovation Hall, Room 134

Instructor: Ted Dumas

Contact Information: tdumas@gmu.edu, 3-9170

Office Hours: Tuesday, 1:30am – 2:30pm or by appointment

Office Location: Krasnow Hall, Room 109

Last day to add: 01/23/2024

Last days to drop: 01/30/2024 (0% tuition liability), 02/06/2024 (50% tuition liability)

COURSE INFORMATION

Course Objectives

This is an advanced multidisciplinary course centered on stress and anxiety. Relationships between body and mind are emphasized. The first portion of the course covers nuts and bolts about the neurobiology associated with thoughts, feelings, and actions. The second third of the course defines important terms and discusses the basics of mind-body connections. The latter third of the course focuses on interactions between cognition and emotion and finishes with a holistic approach to living a healthier life. The course is lecture-based with some online videos.

Education Mode

This class will be delivered in person!

Textbook

There is no textbook to purchase. Course material is derived from *Neuroscience 6e* (Purves et al) and a six-hour seminar delivered by the instructor to healthcare providers. The syllabus for this course, *Calming an Overactive Brain*, will be distributed via BlackBoard. All other reading materials are primary research manuscripts and review articles also be available at Blackboard. Two talks by Dr. Robert Sapolsky (Stanford Neurobiologist) will be the substance of one of the lectures.

Talks by Dr. Robert Sapolsky

“The Uniqueness of Humans”

https://www.ted.com/talks/robert_sapolsky_the_uniqueness_of_humans

(37 minutes)

“The Biology of Humans at Their Best and Worst”

[https://www.youtube.com/watch?v=ORthzIOEf30&list=PL4sAUyGOV7IZW4fx6Ncy6-](https://www.youtube.com/watch?v=ORthzIOEf30&list=PL4sAUyGOV7IZW4fx6Ncy6-RwcYLCNapQC&index=8)

[RwcYLCNapQC&index=8](https://www.youtube.com/watch?v=ORthzIOEf30&list=PL4sAUyGOV7IZW4fx6Ncy6-RwcYLCNapQC&index=8)

(16 minutes)

Grading

Exams: There are a total of three scheduled exams, one being a final examination. Exam 1 is worth 20% of the final grade. Exams 2 is worth 30% of the final grade. Exams 3 is worth 40% of the final grade. The final exam is NOT cumulative. There are no make-up exams. Changes to exam dates or times or make-up exams are not allowed unless the student has written medical documentation in advance. Medical documentation for a family member or friend is not sufficient to request a make-up exam. Please do not put the instructor in a difficult position by missing an exam and requesting a make-up without written medical documentation.

Presentations: Each student is required to deliver one very short presentation (approximately five minutes) on a topic related to the course that is scheduled with the instructor at least one week in advance. The instructor must approve the topic and presentation contents prior to the presentation. The presentation counts for 10% of your final grade. There are no make-up presentations.

Grading Policy

A score of 90% or above generally results in a grade of A- or above, 80-89% corresponds to a B- or above, 70-79% results in a C- or above, and 65-69% results in a D. For undergraduates, a final grade below 65 is a failing grade. For graduate students, any final grade below 80 is a failing grade. These number-to-letter grade conversions serve as a guideline and are not absolute. The final grades may be determined on a curve if this is in the students' favor and justified in the opinion of the instructor.

SUPPLEMENTARY INFORMATION

Academic Integrity

GMU is an Honor Code university. Please see the University Catalog for a full description of the code and the honor committee process. Academic integrity is taken very seriously. When you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free exchange of ideas regardless of gender, race, ability, or age. Vigorous discussion and debate are encouraged with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

GMU Email Accounts

Students must use their Masonlive email accounts to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information.

Office of Disability Services

Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students. If you are seeking accommodations for this class, please first visit <https://ds.gmu.edu/> for detailed information about the Disability Services registration process. Then please discuss your approved accommodations with me. Disability Services is in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

WRITING CENTER: Johnson Center, Floor 2, Room 227E; (703) 993-1200,

<https://writingcenter.gmu.edu>

UNIVERSITY LIBRARIES "Ask a Librarian" <http://library.gmu.edu/ask>

COUNSELING AND PSYCH SERVICES (CAPS): (703) 993-2380; <http://caps.gmu.edu>

University Policies

The University Catalog, <http://catalog.gmu.edu>, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at <http://universitypolicy.gmu.edu/>. All members of the university community are responsible for knowing and following established policies.

Class Policies

The instructor of this course reserves the right to enter a failing grade to any student found guilty of an honor code violation. Use of cell phones, pagers, and other communicative devices are not allowed. Please keep out of sight. Laptops or tablets may be permitted for the purpose of taking notes only. Regarding electronic devices (such as laptops, cell phones, etc.), please be respectful of your peers and your instructor and do not engage in activities that are unrelated to class. Such disruptions show a lack of professionalism and may affect your grade.

Neuroscience 6e
Calming an Overactive Brain

Week of Semester	Monday	Wednesday
Week 1 Wed. Jan. 17 th		Cell Signaling & Neurotransmitters
Week 2 (Homework 1: 01/21) Jan. 22 nd , Jan. 24 th	Neurotransmitters & Receptors	Receptors, Signaling, & Plasticity
Week 3 (Homework 2: 01/28) Jan. 29 th , Jan. 31 st	Sapolsky Videos & Discussion	Fear & Stress
Week 4 (Homework 3: 02/04) Feb. 5 th , Feb. 7 th	Anxiety & Anxiety Disorders	Immunity
Week 5 Feb. 12 th , Feb. 14 th	Exam 1 Review	Exam 1
Week 6 Feb. 19 th , Feb. 21 st	<i>No Lecture!</i>	Eating & Digestion
Week 7 Feb. 26 th , Feb. 28 th	Child Development	Obsessive-Compulsive Disorders
Week 8 (Homework 5: 03/04) Mar. 4 th , Mar. 6 th	<i>Spring Recess, No Class!</i>	<i>Spring Recess, No Class!</i>
Week 9 (Homework 6: 03/10) Mar. 11 th , Mar. 13 th	Sleep & Pain	Brain Function & Memory
Week 10 (Homework 7: 03/17) Mar. 18 th , Mar. 20 th	Exam 2 Review	<i>No Lecture!</i>
Week 11 Mar. 25 th , Mar. 27 th	Exam 2	Depression, Helplessness & PTSD
Week 12 (Homework 8: 03/31) Apr. 1 st , Apr. 3 rd	Aging	<i>No Lecture!</i>
Week 13 (Homework 9: 04/07) Apr. 8 th , Apr. 10 th	<i>Student Presentations</i>	<i>No Lecture!</i>
Week 14 (Homework 10: 04/14) Apr. 15 th , Apr. 17 th	<i>Student Presentations</i>	Coping_Exercise, Diet, & Cognitive Approaches
Week 15 (Homework 11: 04/21) Apr. 22 nd , Apr. 24 th	<i>Student Presentations</i>	<i>Student Presentations</i>
Final Exams Apr. 29 th , May. 1 st	Final Exam Review	<i>No Lecture!</i>
Final Exams Monday, May. 6th	Final Exam: 10:30-1:15pm	