

BI333 EV1 NEUROSCIENCE
DR. EMMA SARRO
DOMINICAN COLLEGE
FALL 2020
ONLINE
Credit Hours: 3

Zoom Online Office Hours:
Meeting ID: 963 802 6855
Password: 565712

Monday: 12-2pm
Tuesday: 11:30-12:30
Thursday: 11:30-12:30
Other hours by appointment.
Office: 845-848-6011
Cell: 401-419-0024
Emma.Sarro@dc.edu

Course Description and Objectives:

The goal of this course will be to obtain and display a broad understanding of the biology of the brain and the systems that underlie behavior. We will begin with a thorough coverage of the neurophysiology of individual cells in the brain, synaptic transmission, neurotransmitter systems as well as neuroanatomy. We will then examine topics such as sensory system function, emotion, language, and mechanisms of memory as well as a special focus on the motor system and motor learning. We will also examine deficits in the nervous system and how they lead to specific mental illnesses, and possibilities for recovery.

College-wide Academic Learning Objectives Addressed in this Course

1. Discover and utilize information through responsible use of appropriate technologies.
2. Analyze, synthesize, and evaluate ideas and information to formulate meaningful conclusions.
3. Express and exchange ideas effectively through various modes of communication.

Reading:

- Neuroscience: Exploring the Brain, 4th edition (or any edition); Bear M, Connors, B & Paradiso, M

- The Man Who Mistook His Wife for a Hat, by Oliver Sacks (This will be for a book assignment and can be found on Amazon for less than 10\$)

Course Assessments:

3 online lecture exams	45% of grade (15% each)
1 online <i>Cumulative</i> final exam	15% of grade
1 book report assignment	15% of grade
Discussion board participation	15% of grade
Weekly Lecture-based quizzes	10% of grade

Grading:

The final grade for the course will be determined from your performance on three midterm exams (45%), one cumulative final exam (15%), a book report assignment (15%), participation / performance on the discussion board based on several article readings (15%), and weekly quizzes based on lecture (10%).

%	Letter	%	Letter
96-100	A	72-75	C
92-95	A-	68-71	C-
88-91	B+	64-67	D+
84-87	B	60-63	D
80-83	B-	<60	F
76-79	C+		

Discussion board: Course Attendance/Participation Policy: Participation in discussion boards throughout the semester is mandatory. I will post an assignment that requires a post in a forum on blackboard. This could range from asking each student to discuss a topic or ask a question from lecture, answer a neuroscience-based question I post in the forum, or to read an article and discuss topics in the article. For each forum topic or thread, each student is required to post a new thread in the forum, as well as respond to at least 1 other student (though there is no limit to how many responses you can make). I will post a due date to participation in each forum discussion. Failure to post comments by the due date will result in a 0 for that discussion.

Exams: 3 Online lecture exams and 1 online final exam will be given throughout the semester. There will be a set time to complete the exam and time limit once the test has begun. If a student is going to be absent on the day of an exam, it is his/her responsibility to notify me **prior to the exam. There will be no make-up exams.**

Book report: An assignment based on the book The Man Who Mistook His Wife for a Hat, by Oliver Sacks will be assigned after the semester starts and will be due by the date indicated in the syllabus. This is an individual assignment and each paper will be assessed for originality.

Lecture Quizzes: After watching/listening or looking over each lecture, students will submit answers to a short quiz that is posted on blackboard. This document will then be submitted to me via email or via Blackboard

Academic Integrity

Honor is a most important value. Familiarity with and observance of academic integrity as outlined in the **Student Handbook** is expected of all students. As such, all reports must be properly cited, and integrity must be practiced in all exams and associated activities. Not to observe academic integrity may result in failure of this course and the breach of academic integrity reported to the Dean's office for official review.

The following is Dr. Sarro's definition of cheating.

Cheating constitutes the following:

- + Communication with or copying from another student **during** an examination.
- + Introducing any unauthorized materials (written, printed or blank) into an examination room.
- + Introducing any electronically stored information into an examination room.
- + Obtaining a copy of an unseen written examination prior to the date and time of its authorized.
- + Gaining access to unauthorized material relating to an examination during or before that examination.
- + Discussing with others the content of the exam or giving others information regarding the exam.
- + Asking a student from another section of this course for information regarding the exam.

If a student is caught cheating he or she will receive a zero for that assignment or exam. If a student is caught cheating on the final exam, he or she will receive an F for the course. Any instance of cheating will be put on the student's record.

Learning Accommodations:

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with The Office of Special Services in Rosary Hall at 845.848.4035. That office can provide written documentation that specifies the needed modifications (i.e., note taker, extra time for tests) to the instructor. If you have not contacted them please do so.

Title IX/NY State Education Law 129-B Compliance:

The health, safety and well-being of our students is Dominican College's primary concern. If you or someone you know is a victim/survivor of sexual assault, domestic violence, dating violence, and/or stalking, know that you can find the

appropriate resources on campus and in the Rockland County community to assist in both immediate and long-term care and recovery. As a faculty member, I am required by the College to report any incident of sexual misconduct to the College's Title IX Coordinator and, therefore cannot guarantee confidentiality. This includes all relevant details I may become aware of. Although I have to make that notification, our goal is to make sure you feel safe and are aware of the different resources available to you, as well as how to easily access them.

The College understands that sexual violence can undermine your academic success. It is important that you know you can choose to seek out confidential resources on campus, including:

- Counseling Services (845.848.4036/4037)
- The Student Health Center (845.848.7918)
- Campus Ministry (845.848. 4031)
- The Center for Safety and Change Campus Advocate (845-634-3344)

For more information about these confidential resources, additional off-campus resources, or to formally report a violation of policy to the College or local law enforcement, visit <https://www.dc.edu/health-safety-wellness/sexual-misconduct-title-ix/> or contact the acting Title IX Coordinator.

Links to each week's lecture will be posted at the beginning of the week. Any assignment or discussion topic that goes along with the information will be assigned then, with a due date.

Week of	Lecture Topics	Assignments/Tests
August 31:	<ul style="list-style-type: none"> - <i>Introduction to the course and syllabus overview</i> - Neurons and Glia - Neural Membrane at rest 	- <i>Friday (Sep 4):</i> Lecture Quiz 1 due 5pm.
September 7:	<ul style="list-style-type: none"> - The Action Potential - Synaptic Transmission 	- <i>Wednesday (Sept 9):</i> Discussion Board Assignment 1 due - <i>Friday (Sept 11):</i> Lecture Quiz 2 due 5pm.
September 14:	<ul style="list-style-type: none"> - Neurotransmitters - Structure of the NS, CNS anatomy, Cranial Nerves 	- <i>Friday (Sept 18):</i> Lecture Quiz 3 due 5pm.
September 21:	<p>*No new lectures during test week*</p> <p><i>*Exact date and time of test availability and duration will be announced the week before.</i></p>	Thursday- Friday Sept 24-25: Online Lecture Exam #1
September 28:	<ul style="list-style-type: none"> - Chemical Senses (Taste/Smell) - Visual System part 1 	- <i>Friday (Oct 2):</i> Lecture Quiz 4 due 5pm.
October 5:	<ul style="list-style-type: none"> - Visual System part 2 - Auditory System 	- <i>Wednesday (Oct 7):</i> Discussion Board Assignment 2 due - <i>Friday (Oct 9):</i> Lecture Quiz 5 due 5pm.
October 12:	<ul style="list-style-type: none"> - Somatosensation and Pain - Control of Movement - Motor Learning 	- <i>Friday (Oct 16):</i> Lecture Quiz 6 due 5pm.
October 19:	<p>*No new lectures during test week*</p> <p><i>* Exact date and time of test availability and duration will be announced the week before.</i></p>	Thursday-Friday October 22-23: Online Lecture Exam #2:

October 26:	<ul style="list-style-type: none"> - Motor Learning - Chemical Control of the Brain 	-Friday (Oct 30): Lecture Quiz 7 due 5pm.
November 2:	<ul style="list-style-type: none"> - Motivation of Behavior - Reproduction - Emotion 	-Wednesday (Nov 4): Discussion Board Assignment 3 due -Friday (Nov 6): Lecture Quiz 8 due 5pm.
November 9:	<ul style="list-style-type: none"> - Language - Attention 	-Friday (Nov 14): Lecture Quiz 9 due 5pm.
November 16:	<p>*No new lectures during test week*</p> <p><i>* Exact date and time of test availability and duration will be announced the week before.</i></p>	Thursday-Friday November 19-20: Online Lecture Exam #3
November 23:	* No lecture posted: Thanksgiving break *	
November 30:	<ul style="list-style-type: none"> - Learning - Memory 	-Friday (Dec 4): <u>Book Assignment</u> due by midnight -Friday (Dec 4): Lecture Quiz 10 due 5pm
December 7:	- Mental Illness	-Wednesday (Dec 9): Discussion Board Assignment 4 due -Friday (Dec 11): Lecture Quiz 11 due 5pm
December 14:	<p>*No new lectures during test week*</p> <p><i>* Date and time of test availability and duration will be announced the week before.</i></p>	Online Final Exam