

Physiological Psychology

Spring 2020- Index #01893

Section 1- M/TH 12:00PM-01:20 PM (830:313:01)

Instructor: Dr. David J. Barker
Office: Psychology Building Room 325
Office Hours: Monday 1:30-3:00PM or by Appt (Email me with a list of times)
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Textbook: Carlson & Birkett- "Physiology of Behavior"-
ISBN for the Revel version of the text: 0134320824

Course Description:

This course focuses on learning about the physiology of the brain. The goal is to understand how neurons and glia function, how neurons are connected into systems with specific inputs and outputs, and how changes in these systems might account for learning, memory, emotions, and psychological illnesses.

Sakai

This course will have a dedicated Sakai website that will contain the downloadable materials and be used for course announcements. Exam and final grades will also be posted to this site.

Revel

Revel is the textbook website, which includes useful videos, teaching aids and practice tests. No student activities on this website are monitored, so feel free to use these materials as a study aid to strengthen your knowledge before the exams.

Grading and Exams

Exam scores are the primary determinants of your grade; no credit will be given for extra work. The only homework is to study the textbook and lectures.

Three exams of equal weight will comprise multiple choice and diagram questions. The third (final) exam will NOT be cumulative. Your final grade will be determined from the average of your numeric scores on the three exams. If the grade distribution is lower than a standard deviation, I reserve the right to curve the grade or offer opportunities to correct and raise grades. These opportunities will always be offered on a whole-class basis. Individual extra-credit will not be offered.

On days of exams please bring #2 pencils to mark your Scantron sheets.

Missing an exam will not be excused, except in an **emergency** (you must provide written documentation, such as a physician's note); and must notify the professor on or before the exam date. Only one makeup exam will be offered at the end of the semester. This exam will be different than the corresponding midterm exam and will be entirely composed of written answer questions. In other words, it will be much harder! If you have athletic or religious obligations that conflict with the exams, then anticipate the interruption and let me know in advance! I will make arrangements for you to take the exam and avoid having to take the much harder makeup exam.

This is a tentative schedule for the semester. The exam dates are firm but the dates of specific topics and readings will be adjusted if necessary. I will post updated versions of the syllabus on Sakai if any changes are made.

Date	Topic	Reading
Thursday, 1/23	Introduction	Chapter 1 (not tested)
Monday 1/27	NO CLASS-WINTER BRAIN CONFERENCE	Read Chapter 2!!!
Thursday 1/30	Neurons and Glia	Ch2 LO 2.1-2.4
Monday 2/3	Cellular Physiology	Ch2 LO 2.5-2.9
Thursday 2/6	Synaptic Transmission	Ch2 LO 2.10-2.18
Monday 2/10	Systems Neuroscience	Ch5 LO 5.1-5.6
Thursday 2/13	Recording and Manipulating Neurons	Ch 5 LO 5.7-5.12
Monday 2/17	Motor System I	Ch 8 LO 8.1-8.6
Thursday 2/20	Motor System II	Ch 8 LO 8.7-8.14
Monday 2/24	Review for Exam #1	
Thursday 2/27	EXAM #1	
Monday 3/2	Visual System I	Ch 6
Tuesday 3/5	Visual System II	Ch 6
Monday 3/9	Auditory and Vestibular System	Ch7 LO 7.1-7.12
Thursday, 3/12	Somatosensation	Ch 7 LO 7.13-7.17
Monday, 3/16	NO CLASS-SPRING RECESS	N/A
Thursday 3/19	NO CLASS-SPRING RECESS	N/A
Monday, 3/23	Gustatory and Olfactory systems	Ch 7 LO 7.18-7.24
Thursday 3/26	Review for Exam #2	
Monday 3/30	EXAM #2	
Thursday 4/2	Emotion	Ch 11
Monday 4/6	Ingestive Behaviors	Ch 12
Thursday 4/9	Learning and Memory I	Ch 13
Monday 4/13	Learning and Memory II	Ch 13
Thursday 4/16	Psychopharmacology	Ch 4
Monday, 4/20	Psychopharmacology II	Ch 4
Thursday 4/23	Drug Addiction	Ch 18
Monday 4/27	Stress, Anxiety and Neurodevelopmental Disorders I	Ch 17
Thursday 4/30	Stress, Anxiety and Neurodevelopmental Disorders II	Ch 17
Monday 5/4	Review for Exam #3	
FINAL EXAM	Per Final Exam Schedule	Finalexams.rutgers.edu

Attendance

My not taking attendance does not mean that I don't care or notice if you attend class.

Classroom distraction policy

Each student has paid to participate in this course and part of my job is to protect your right to that education. This means I take a strong stance against using laptops for other activities during class and against side-conversations with your seatmates. On the other hand, I am happy to stop class and answer *any and every semi-relevant question* that you might have to the best of my ability.

Succeeding

To succeed in class, you should 1) attend class, 2) read each assignment before the corresponding lecture, 3) take notes on the power point during class, 4) Speak up and ask questions during class or schedule office hours to clarify difficult concepts, 5) use the revel study aids to help solidify concepts and 6) form study groups with your peers.

My goal is to teach this material in a way that allows you to learn and master these concepts. This is a difficult course, but you should have no trouble succeeding if you do the work that's asked of you.

Current Academic Integrity Policy

<http://academicintegrity.rutgers.edu/academic-integrity-policy/>

Violations include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity.

Cheating and Plagiarism

Short version: Don't cheat. Don't plagiarize.

Longer version: Cheating on tests or plagiarizing materials in your papers deprives you of the educational benefits of preparing these materials appropriately. It is personally dishonest to cheat on a test or to hand in a paper based on unacknowledged words or ideas that someone else originated. It is also unfair, since it gives you an undeserved advantage over your fellow students who are graded on the basis of their own work. In this class I will take cheating very seriously. All suspected cases of cheating and plagiarism will be automatically referred to the Office of Judicial Affairs, and I will recommend penalties appropriate to the gravity of the infraction. The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. I strongly advise you to familiarize yourself with this document, both for this class and for your other classes and future work. To help protect you, and future students, from plagiarism, we require all papers to be submitted through Turnitin.com.

Since what counts as plagiarism is not always clear, I quote the definition given in Rutgers' policy: **Plagiarism: Plagiarism is the use of another person's words, ideas, or results without giving that person appropriate credit. To avoid plagiarism, every direct quotation must be identified by quotation marks or appropriate indentation and both direct quotation and paraphrasing must be cited properly according to the accepted format for the particular discipline or as required by the instructor in a course. Some common examples of plagiarism are:**

- **Copying word for word (i.e. quoting directly) from an oral, printed, or electronic source without proper attribution.**
- **Paraphrasing without proper attribution, i.e., presenting in one's own words another person's written words or ideas as if they were one's own.**
- **Submitting a purchased or downloaded term paper or other materials to satisfy a course requirement.**
- **Incorporating into one's work graphs, drawings, photographs, diagrams, tables, spreadsheets, computer programs, or other nontextual material from other sources without proper attribution.¹**

A SPECIAL NOTE: Students often assume that because information is available on the Web it is public information, does not need to be formally referenced, and can be used without attribution. This is a mistake. *All* information and ideas that you derive from other sources, whether written, spoken, or electronic, must be attributed to their original source. Such sources include not just written or electronic materials, but people with whom you may discuss your ideas, such as your roommate, friends, or family members. They deserve credit for their contributions too!

Disability Services

¹ <http://academicintegrity.rutgers.edu/academic-integrity-policy/>

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Inclusivity Statement

I understand that our members represent a rich variety of backgrounds and perspectives. The Psychology Department is committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

- . share their unique experiences, values and beliefs
- . be open to the views of others
- . honor the uniqueness of their colleagues
- . appreciate the opportunity that we have to learn from each other in this community
- . value each other's opinions and communicate in a respectful manner
- . use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the Rutgers community

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / www.rhscaps.rutgers.edu/
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.