

# Physiological Psychology

Fall 2021      Index # 03744

This course is asynchronous, but for scheduling purposes we will follow the approximate timing of a Tuesday and Thursday class. We will observe most relevant breaks or changes in scheduling that might affect this schedule.

**Instructor:**            **Dr. David J. Barker**  
*Office Hours:* TBD, via Webex  
<https://rutgers.webex.com/meet/djbarker>  
*Email:* [David.Barker@Rutgers.edu](mailto:David.Barker@Rutgers.edu)

**Teaching Asst:**        **TBA**  
**Office hours:** To Be Announced

**Textbook:**             Carlson & Birkett- "Physiology of Behavior 13<sup>th</sup> edition"-  
ISBN for the Revel version of the text: 9780135455562

**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.

**Technology Requirements:** You will need a PC with a solid internet connection for taking quizzes, connecting to Canvas, and accessing the virtual textbook. [I am here to help](#). If you are having issues, please discuss them with me and we will develop a plan. Rutgers has also provided the guidance below:

Please visit the Rutgers Student Tech Guide page for resources available to all students. If you do not have the appropriate technology for financial reasons, please email Dean of Students [deanofstudents@echo.rutgers.edu](mailto:deanofstudents@echo.rutgers.edu) for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at <https://financialaid.rutgers.edu/>.

**Canvas:** This course will have a dedicated Canvas website (<https://canvas.rutgers.edu/>) that will contain the downloadable materials and be used for course announcements. Exam and final grades will also be posted to this site.

## Grading and Exams:

**As a self-paced, asynchronous online course, we will focus on the mastery of material.** You will complete 2-3 lectures, followed by a quiz covering the material from those lectures. There are two main components of your grade:

- 1) **Quiz scores are the main determinant of your grade. Quizzes are open book and open note but must be completed independently.**
  - a. There are seven, 40 point quizzes for a total of 280 points.
  - b. Your lowest quiz grade will be dropped. (240 points kept).
  - c. One re-take will be issued per student, per semester for technological failures. Any additional re-takes will be at Dr. Barker's discretion. Documentation always works in your favor.
- 2) **You will submit one example quiz question to the discussion board for each lecture. Each of these is worth a total of 3 points (60 total points can be earned).**
  - a. Example questions are graded on participation. The questions must be written in the form of a multiple-choice question with 4 possible answers. The primary goal of

this discussion is to help you and your fellow students to study for the exam. Put differently, this a crowd-sourced study-guide.

Your final grade will be determined based on the sum of your scores from the quizzes and discussion participation. **Once the lowest quiz is dropped, there will be a total of 300 points for the semester.** 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.**

<b>This is a tentative schedule for the semester. The dates may be adjusted, if necessary. I will post updated versions of the syllabus on Canvas if any changes are made.</b>		
<b>Date</b>	<b>Topic</b>	<b>Reading</b>
Week1 (9/2)	Meet Dr. Barker-Expectations for Virtual Learning	
Week 1 (9/7)	An Introduction to Physiological Psychology	Chapter 1 (not tested)
Week 2 (9/9)	Neurons and Glia	Ch2 LO 2.1-2.4
Week 3 (9/14)	Cellular Physiology	Ch2 LO 2.5-2.9
Week 3 (9/16)	Synaptic Transmission	Ch2 LO 2.10-2.18
Week 4 (9/21)	<b>QUIZ 1- Chapter 2</b>	
Week 4 (9/23)	Systems Neuroscience	Ch5 LO 5.1-5.6
Week 5 (9/28)	Recording and Manipulating Neurons	Ch 5 LO 5.7-5.12
Week 5 (9/30)	<b>QUIZ 2- Chapter 5</b>	
Week 6 (10/5)	Visual System I	Ch 6
Week 6 (10/7)	Visual System II	Ch 6
Week 7 (10/12)	Auditory and Vestibular System	Ch7 LO 7.1-7.12
Week 7 (10/14)	<b>QUIZ 3- Chapter 6 &amp; Chapter (7.1-7.12)</b>	
Week 8 (10/19)	Somatosensation	Ch 7 LO 7.13-7.17
Week 8 (10/21)	Motor System I	Ch 8 LO 8.1-8.6
Week 9 (10/26)	Motor System II	Ch 8 LO 8.7-8.14
Week 9 (10/28)	<b>QUIZ 4- Chapters 7 (7.13-7.17) and 8</b>	
Week 10 (11/2)	Gustatory and Olfactory systems	Ch 7 LO.18-7.24
Week 10 (11/4)	Ingestive Behaviors	Ch 12
Week 11 (11/9)	Emotion	
Week 11 (11/11)	<b>QUIZ 5- Chapters 11 and 12</b>	
Week 12 (11/16)	Learning and Memory I	Ch 13
Week 12 (11/18)	Learning and Memory II	Ch 13
Week 13 (11/23)	<b>QUIZ 6- Chapter 13</b>	
Week 14 (11/30)	Psychopharmacology I	Ch 4
Week 14 (12/2)	Psychopharmacology II	Ch 4
Week 15 (12/7)	Substance Abuse (Drug Addiction)	Ch 18
Week 15 (12/9)	<b>QUIZ 7- Chapters 4 and 18</b>	
<b>FINAL EXAM</b>	<b>NONE- Makeup Exams Only</b>	

**Attendance:** The course is 'self-paced', but with milestones you must hit at each quiz to ensure that you are keeping up. These milestones happen often, so please keep track of them.

### **Current Academic Integrity Policy**

**I will provide every tool for you to learn physiological psychology and am happy to help you learn the material. Your responsibility is to simply put in the work to do so. With this in mind, my policy on academic integrity violations is quite strict. Academic integrity violations will result in a ZERO for the course. Please familiarize yourself with the Rutgers policies on**

**academic integrity. A failure to know the policies is not an excuse for breaking them.**

<http://academicintegrity.rutgers.edu/>

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

### **Cheating and Plagiarism**

*Short version:* Do not cheat. Do not 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 <https://policies.rutgers.edu/10213-currentpdf>. 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.<sup>1</sup>

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**

**(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

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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/](http://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/](http://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.