

**University of Florida**  
**Department of Psychology**

**Course:** PSB3002 Physiological Psychology

**Summer A, 2022**

**Section Number:** 17419 - 4140

**Class Meeting Times:** M,T,W,R,F Period 4 (12:30 PM - 1:45 PM), Psychology Building, Room 130

**Instructor:** Anna Farmer

**Contact:** via Canvas message, or email: [alfarmer8@ufl.edu](mailto:alfarmer8@ufl.edu)

**Office hours:** Tuesday 10:00 – 11:00 am, Wednesday 2 - 3 pm, or by appointment

**Course Description:** This course is an introduction to the biological processes of the brain that give rise to behavior. Topics covered by this course include the anatomy and physiology of the nervous system, nervous system development and neurodevelopmental diseases, how brain functioning supports emotion, sensory perception, and learning and memory, the neuroanatomical basis and function of sleep, the role of the brain in addiction and substance abuse, as well as an overview of the neurobiological mechanisms underlying common neurodegenerative and neuropsychiatric disorders. Students majoring in the Behavioral and Cognitive Neuroscience specialization of Psychology or IDS majors in neurobiological sciences should take Behavioral Neuroscience (PSB 3340) instead of this course or should consult with their academic advisor before taking this course.

**Course Goals and Objectives:** By the end of this course students should be able to:

- Identify the basic structures of the central nervous system.
- Understand the electrical and chemical properties of neurons and how neurons convey signals in the brain.
- Understand the basic principles of psychopharmacology and neurotransmitter function.
- Be aware of the different methods used by neuroscientists to study the relationships between the brain and behavior.
- Have a fundamental understanding of how sensory organs support sensory perception.
- Describe how the brain and spinal cord support the planning and control of movements.
- Understand the physiological role and processes of sleep and biological rhythms.
- Understand the neuroanatomical basis of emotions.
- Describe brain processes that support learning and memory.
- Have a basic understanding of neurodevelopment and the causes/symptoms of neurodevelopmental disorders.
- Be aware of the symptoms and neurobiological basis for common neurodegenerative and neuropsychiatric disorders.
- Identify the neural mechanisms underlying substance abuse.

**Required Textbook:** Carlson, N.R. & Birkett, M.A. Physiology of Behavior, 13th edition

The course textbook may be accessed in any format (hardcopy, e-book, UF All Access). For UF All Access: Login at the following website and Opt-In to gain access to your UF All Access course materials - <https://www.bsd.ufl.edu/AllAccess> – UF All Access will provide you with your required materials digitally at a reduced price and the charge will be posted to your student account. This option will be available starting 1 week prior to the start of the semester and ending 3 weeks after the first day of class.

**Bring to Class:**

- Please bring paper/pencil to class so you can draw brain structures and take quizzes.
- Bringing the textbook to class is recommended but not required. Students are expected to read the assigned chapters before class.

**Class Demeanor:** Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

**Expectations:** You are expected to attend class regularly and carry out the reading assignments listed in this syllabus. You are also expected to check your email regularly (at least once a day) and to visit E-learning on a regular basis. Students typically find that for each hour in class, at least two additional hours are required for preparation.

**Attendance:** Attendance is strongly recommended but will not directly be part of your grade. However, in-class quizzes, in-class participation, and group activities cannot be made up (see grading policy below). Information covered by guest lecturers that may not be in the textbook will also be included on quizzes and exams.

**Grading Policy:** Course grades will be based on 4 exams, in-class quizzes, in-class participation, and 1-2 group presentations.

Assignment	Points	Percent of Grade
Exam 1 (4 exams @ 50 points each)	50	25%
Exam 2	50	25%
Exam 3	50	25%
Exam 4	(lowest exam dropped)	(lowest exam dropped)
In-class quizzes	20	10%
Group presentations	30	15%
<b>Total</b>	<b>200</b>	<b>100%</b>

At any time, you may **calculate your grade** by adding up the number of points earned, dividing that sum by the number of points attempted, and multiplying the result by 100. Information about

UF's current grading policies may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**Quizzes:** Periodic in-class quizzes and for credit in-class activities will consist of multiple choice, fill in the blank, short answer, or occasionally drawings of brain structures. The lowest two quiz grades will be dropped. If you miss a quiz **for any reason**, it will count as one of your dropped quiz scores.

**Exams:** There will be four in-class exams during the course. Exams may consist of multiple choice, short answer, and 1-2 short essay questions. Each exam is worth 50 points. The lowest exam grade will be dropped. **Given that the lowest exam grade is dropped, no make-up exams will be given for missed exams.**

**Group Presentations:** You will be assigned to present 1-2 group presentations to the class as a part of a small group. Groups will be assigned. The number of presentations required will depend on the size of the class (groups in large classes will only be able to present one presentation due to time constraints). Presentations will be short 10-15 minute presentations on a topic chosen by your group from a list of approved topics followed by questions from the class. A grading rubric and presentation instructions will be provided to your group prior to the presentation. Groups will also be expected to participate by asking questions following presentations given by other groups.

**Guest Speakers:** Guest speakers conducting research in different course topics will occasionally give lectures. These lectures provide opportunities for students to learn about research methods and strategies, as well as gain deeper insights into particular topics. Information from guest lectures will be included on the exams.

#### Grading Scale:

Grade	Scale	Grade	Scale
A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	E	<60%

**Policy for Grade Disputes:** You will have **one week** (including weekends and holidays) after any course material grade has been posted to dispute your grade. Grade disputes will NOT be accepted after a week has passed. If you want to dispute a grade, you will need to send an email to the instructor that includes a paragraph explaining the reason for the dispute. For exams/quizzes, include a description of the question and a paragraph explaining why your answer is correct with references to the material in the text for each question.

**Students with Special Needs:** If you are a student with a disability and would like to request disability-related accommodations, you are encouraged to contact the Disability Resource Center as early in the semester as possible. The Disability Resource Center is located in 001 Building 0020 (Reid Hall). Their phone number is 392-8565. If you have a documented disability, you must contact me immediately so accommodation can be made from that point on.

**Sexual Harassment & Disclosures of Sexual Violence:** Sexual Harassment is not tolerated in this class, in the Department of Psychology, or at the University of Florida. Sexual harassment includes: the inappropriate introduction of sexual activities or comments in a situation where sex would otherwise be irrelevant. Sexual harassment is a form of sex discrimination and a violation of state and federal laws as well as of the policies and regulations of the university. All UF employees and students must adhere to UF's sexual harassment policy which can be found here: <https://hr.ufl.edu/forms-policies/policies-managers/sexual-harassment/>. Please review this policy and contact a university official if you have any questions about the policy.

As mandatory reporters, university employees (e.g., administrators, managers, supervisors, faculty, teaching assistants, staff) are required to report knowledge of sexual harassment to UF's Title IX coordinator. Title IX violation includes sexual harassment, sexual assault, stalking, domestic/intimate partner violence, etc. For assistance or to inform Title IX any incident(s) that may constitute a Title IX violation, please complete the Title IX Information Form here: <https://titleix.ufl.edu/report/>, or email [inform@titleix.ufl.edu](mailto:inform@titleix.ufl.edu), or call 352-273-1094.

**Academic Dishonesty:** The University of Florida holds its students to the highest standards, and we encourage students to read the University of Florida Student Honor Code and Student Conduct Code (Regulation 4.040), so they are aware of our standards. Any violation of the Student Honor Code will result in a referral the Student Conduct and Conflict Resolution and may result in academic sanctions and further student conduct action. The two greatest threats to the academic integrity of the University of Florida are cheating and plagiarism. A link to the honor code can be found here: [UF Student Honor Code](#)

**In-Class Recording:** Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

**University COVID-19 Virus Policy:** In response to COVID-19, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available and have been demonstrated to be safe and effective against the COVID-19 virus. Visit [one.ufl.edu](https://one.ufl.edu) for screening / testing and vaccination opportunities.
- If you are sick, stay home. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

**UF Policies on Software Use:** All faculty, staff, and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

### **Other Student Resources:**

#### **Health and Wellness**

- ***U Matter, We Care:*** If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- ***Counseling and Wellness Center:*** Visit the [Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- ***Student Health Care Center:*** Call 352-392-1161 for 24/7 information to help you find the care you need or visit the [Student Health Care Center website](#).
- ***University Police Department:*** Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- ***Sexual Assault Recovery Services (SARS):*** Student Health Care Center, 352-392-1161.

- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the [UF Health Emergency Room and Trauma Center](#) website.
- **GatorWell Health Promotion Services:** For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.

## Academics

- **UF Computing Help Desk** at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).
- **Career Connections Center:** Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services. <https://career.ufl.edu/>
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources. <https://uflib.ufl.edu/find/ask/>
- **Teaching Center:** Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring. <https://academicresources.clas.ufl.edu/>
- **Writing Studio:** 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>
- **Student Complaints On-Campus:** <https://registrar.ufl.edu/complaint.html>

**Course Schedule:**

<b>Week</b>	<b>Dates</b>	<b>Topics</b>	<b>Readings</b>
1	May 9-13	Course Introduction Structure/Function of Nervous System Cells Structure/Function of Nervous System	Chapters 1-3
2	May 16-20	Psychopharmacology and Neurotransmitters <b>Groups 1&amp; 2 present (Wednesday, May 18)</b> Vision <b>Groups 3 &amp; 4 present (Thursday, May 19)</b> <b>Exam 1 (Friday, May 20)</b>	Chapters 4, 6
3	May 23-27	Audition, the Body Senses, the Chemical Senses Control of Movement Sleep and Biological Rhythms <b>Groups 5 &amp; 6 present (Friday, May 27)</b>	Chapters 7-9
4	May 31 – June 3	<b>May 30: No class/ Memorial Day</b> Emotion <b>Exam 2 (Wednesday, June 1)</b> Learning and Memory <b>Groups 7 &amp; 8 present (Friday, June 3)</b>	Chapters 11, 13
5	June 6 - 10	The Developing Nervous System <b>Groups 9 &amp; 10 present (Tuesday, June 7)</b> Neurological/Neurodegenerative Disorders <b>Exam 3 (Friday, June 10)</b>	Chapters 15, 16
6	June 13-17	Schizophrenia and Affective Disorders Substance Abuse <b>Exam 4 (Friday, June 17)</b>	Chapters 17, 19