

PSY 215: Biology of Behavior

Mon/Wed 11:30am-12:50pm, Central King Building 212

SYLLABUS DRAFT 1/17/24 – SUBJECT TO REVISION

Instructor: Dr. Julia Hyland Bruno

Contact: julia.hylandbruno@njit.edu

Office hour: Wed 1:30-2:30pm or by appointment, Cullimore 313

PREREQUISITES

PSY 210 (Introduction to Psychology) must be taken as a pre- or co-requisite.

COURSE DESCRIPTION

This course provides a general introduction to the underlying biological principles and mechanisms that give rise to complex human behaviors. Topics include neurons, neural communication, brain structure and function, processing in sensory systems, cognitive neuroscience, and neural and hormonal influences on health and emotion. This course focuses on emerging methods and approaches to an integrated understanding of complex behavior, with an emphasis on applications for STEM professional practice.

LEARNING OUTCOMES

By the end of the course, students will be able to:

- understand the multiple levels of causation involved in biological explanations of behavior;
- appreciate phenomena related to brain and behavior through an integrative lens;
- demonstrate familiarity with the major theoretical perspectives and core empirical findings in the history of biopsychology;
- demonstrate basic scientific literacy (be able to apply knowledge of the conventions of scientific writing and data presentation in order to read and critically evaluate an original biopsychological journal article).

COURSE MATERIALS

Textbook: This course follows the basic structure of the following textbook:

- Pinel, J.P.J., & Barnes, S.J. (2021). *Biopsychology* (11th Ed.). Pearson. ISBN-13: 9780137588596

The 11th edition is available as an ebook and comes with online resources which you may find useful. However, you are not required to purchase this edition; any print or online edition is fine.

Journal articles: In addition to the assigned textbook chapters, everyone will read a classic primary source article as part of an **independent reading project** (see COURSE STRUCTURE & REQUIREMENTS, below).

Canvas: You will need internet access to view course content via the web-based course software Canvas. Please make sure that you can log in and access the site (<https://njit.instructure.com/>).

Google Drive. We will be using Google Docs, Sheets, Slides, and Forms throughout the semester. Please use the account associated with your NJIT email.

Technology and communication: Please bring *both* a notebook/paper and writing utensil *and* a laptop or tablet with you to every class meeting. Please speak with me individually if technology is or becomes an issue for you. Email is the primary mode of communication in this course. Please check your email regularly and make sure your Canvas notifications are set to receive broadcast announcements via email. If I do not respond to your email within 24 hours, please follow up with me.

COURSE STRUCTURE & REQUIREMENTS

This course consists of lectures, group discussions and other small group work, graded in-class assignments, four exams, and an independent reading project. Lectures will integrate assigned textbook chapters with other relevant content. *Attendance is required.*

Classwork: Throughout the course there will be regular, graded in-class writing exercises and (unannounced) quizzes. In-class assignments may not be made up; however, only your top 10 quiz and writing assignment grades, respectively, will factor into your course grade.

Independent reading project: In the final third of the course, students will select one of the course topics for more in-depth, independent exploration. There will be three separate assignments associated with this project:

**** Due to the interactive and iterative nature of the assignments, in general late submissions will not be accepted. ****

1. A written **statement of interest** in the chosen topic, including personal/professional/intellectual motivation for wanting to delve deeper and specific questions sparking curiosity.
2. A **journal abstract dissection** of a classic biopsychological study within the topic of choice.
3. A **critical synopsis** of the assigned journal article (written and oral presentation).

A list of possible readings for each topic as well as additional details about project components and expectations will be provided later in the semester.

Exams: There is no single cumulative final exam in this course but there will be an **integrative** in-class exam at the end of each of four course modules. Together the exams count for 60% of the final course grade. Exams will cover the assigned readings and content focused on in class and will be closed-book/closed-notes. The primary aim of the exams is to assess the course Learning Outcomes (see above). Exams will be weighted progressively (counting for 13%, 14%, 16% and 17%, respectively).

Course activities are worth the following percentages of your final grade:

- **Participation: 20%** (including in-class writing assignments and quizzes)
- **Independent reading project: 20%**
 - topic statement of interest: 5%
 - journal article abstract dissection: 5%
 - critical synopsis: 10%
- **Exams: 60%**

Letter grades will be determined using the following scale:

Percentage	Letter (description)
89.5 and above	A (superior)
84.5 – 89.0	B+ (excellent)
79.5 – 84.0	B (very good)
74.5 – 79.0	C+ (good)
69.5 – 74.0	C (acceptable)

59.5 – 69	D (minimum)
59 and below	F (inadequate)

Any extenuating circumstances that could interfere with your ability to complete the requirements for this course must be taken to the Dean of Students. The Dean of Students will discuss your situation with you, assess any relevant documentation, and make the determination of whether any special accommodations will be granted (e.g., late withdrawal from the course, request for a make-up exam, request for an Incomplete, etc.).

PLAGIARISM

NJIT requires me to include this language:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: <http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>.

*Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. **Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.** If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.*

ACCESSIBILITY/ACCOMODATIONS/COUNSELING SERVICES

If you anticipate any issues related to the format or materials of this course, or if you would like to discuss any accommodations that might be helpful, please contact me at the start of the semester. If you have a documented disability, or if you think you might have a disability, you should also be in touch with the Office of Accessibility Resources and Services (OARS), either to request an official accommodation or to discuss requesting one. More information about OARS is available here: <https://www.njit.edu/accessibility/>.

The Center for Counseling and Psychological Services (C-CAPS) provides a number of confidential resources for any student interested in seeking help with personal issues, emotional concerns, or stress. Visit <https://www.njit.edu/counseling/> to learn more.

SCHEDULEKey dates

2/7:	EXAM 1
3/4:	EXAM 2
4/3:	EXAM 3
4/8:	INDEPENDENT READING PROJECT: topic statement of interest
4/15:	INDEPENDENT READING PROJECT: abstract dissection
4/24-4/29:	INDEPENDENT READING PROJECT: critical synopsis
TBA:	EXAM 4