# Behavioral Neuroscience PsycH/BiolH217 Fall 2020 Haverford College Online

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Office Hours: Thursdays 9:00am-10:30am or by appointment

#### **Required Readings:**

Carlson, N. R., (2017). Physiology of Behavior, 12<sup>th</sup> Edition. USA: Pearson

• Purchase of the text through the Pearson/Revel platform is not mandatory, however I have a specific course page through Revel that includes supplemental resources (additional quizzes, flashcards, media library, etc). If you want to access this supplemental information, you must purchase the access card for Revel eBook from the link above or the bookstore (but not eBook platforms like Vitalsource or Redshelf).

Prerequisite course (any of the following or instructor consent):

PSYC 100, PSYC B105, BIOL H123, BIOL H124, BIOL H128, BIOL H129, Psychology AP Score 4

#### **Course Overview**

This course is an introduction to the neural basis of behavior that will explore perception, learning and other cognitive phenomenon from a psychobiological perspective. Upon completion of this course students should be able to:

- Identify the major components of the nervous system and the neuron
- Explain the neurological basis for basic behaviors and selected cognitive phenomena such as learning, memory, neurological disorders and sensory perception.
- Create a conceptualized "model of behavior" that illustrates and contrasts the relationships between the behaviors expressed by an animal and the neurological mechanisms that underlie those behaviors.

#### **Course Grading**

A = 95-100.0%
A = 90-94.9%
B+=87-89.9
B = 83-86.9%
B- = 80-82.9%

**Exams (45%):** 3 Exams 15% each

These exams will assess your knowledge of general concepts covered in each of the three blocks of lectures. Although you will not be explicated re-tested on previous information, the

exams are cumulative to the extent that you will need to retain and retrieve previous information in order to fully answer the questions on subsequent exams.

## Class Pre-assessments (20%):

There will be a short pre-assessment at the beginning of each lecture week (sometimes 2 per week depending on the schedule). Each assessment will be 3-5 questions and can be completed in moodle up to 24 hours prior to the beginning of class.

## **Topic Reflections (20%):**

Each chapter will include a set of virtual activities that examine the principles covered in the text to via podcasts, videos, lab-style activities, or other media. Student will submit a small write up summarizing the activity and behavioral neuroscience principle explored in the activity.

## **Tough Topic Questions (TTQ; 15%):**

Students are required to submit weekly "tough topic" questions. These are questions or topic suggestions that students would like reviewed during the class or chapter review sessions. Students will receive up to 15% depending on if they submit a question for every chapter and questions will be discussed during class sessions.

### **Opportunities for extra points:** up to an additional 6%

Response to TTQ: Once per test block, students may submit a response to a tough topic (worth up to 1% per submission) in the form of a 1-page (max) review of the topic using the course text. This response should summarize the topic (.5%), directly address the commenters questions and clarify any misunderstanding (.25%) and include one additional outside reference with some details from the reference (.25%) that could be helpful to others (e.g. website link, journal article, activity sheet, etc.). Responses should be APA style, 12pt single space.

<u>Concept Map</u>: Once per test block, student can submit a concept map (worth up to 1%) that displays their understanding of the function of and relationships between different neural systems and phenomena in each chapter for that block. Maps can be created using your class and homework notes so be sure to include details while creating those notes.

#### **Access and Disability Services (ADS)**

Haverford College is committed to providing equal access to students with a disability. If you have (or think you have) a learning difference or disability – including mental health, medical, or physical impairment - please contact the Office of Access and Disability Services (ADS) at <a href="https://docs.ncbi.nlm.n

Students who have already been approved to receive academic accommodations and want to use their accommodations in this course should share their verification letter with me and also make arrangements to meet with me as soon as possible to discuss their specific accommodations. Please note that accommodations are **not retroactive** and require advance notice to implement.

It is a state law in Pennsylvania that individuals must be given advance notice if they are to be recorded. Therefore, any student who has a disability-related need to audio record this class must first be approved for this accommodation from the Coordinator of Access and

Disability Services and then must speak with me. Other class members will need to be aware that this class may be recorded.

### **Course Policies**

**Missed Assignments:** There are opportunities to accrue extra course points and as such no late assignments will be accepted unless with an excuse note from the dean.

**Absences:** Class attendance and participation is "optional" although it is highly encouraged that students attend virtual lectures to get clarification on questions and work with other students on assignments.

**Academic Dishonesty:** Please refer to the University policy on cheating and academic dishonesty through the <u>Honor Code</u>

## **Course Topics and Schedule**

Week	Chapter	Торіс	Assignments
7-Sep-20	Syllabus Review, Chapter 1	Introduction	Reflection 1
14-Sep-20	Chapter 2	Structure and Function of cells of the Nervous System	Reflection 2
21-Sep-20	Chapter 3	Structure of the Nervous System	Reflection 3
28-Sep-20	Chapter 4	Psychopharmacology	Reflection 4
5-Oct-20	Chapter Reviews; Exam 1		Concept Map and TTQ response due
12-Oct-20	Chapter 18	Drug Abuse	Reflection 5
19-Oct-20	Chapter 6	Vision	Reflection 6
26-Oct-20	Chapters 7	Audition, the Body Senses, and the Chemical sense	Reflection 7
2-Nov-20	Chapter 10	Reproductive Behavior	Reflection 8
9-Nov-20	Chapter Reviews; Exam 2		Concept Map and TTQ response due
16-Nov-20	Chapter 11	Emotion;	Reflection 9
23-Nov-2020	Th		
30-Nov-20	Chapter 13	Learning and memory	Reflection 10
7-Dec-20	Chapter 15	Neurological Disorders	Reflection 11
14-Dec-20	Read	Concept Map and TTQ response due	