

# Physiological Psychology Lab

## PSYC 373 Section 203 - Spring 2020

**Instructor:** Paul Beatty

**Class Time:** Section 203 - Tuesdays 10:30 am – 12:20 pm

**Class Location:** DKH 2074

**E-mail:** pbeatty@masonlive.gmu.edu

**Office Location:** David King Hall 1014D

**Office Hours:** Tuesdays 9:00 am – 10:00 am  
or by appointment

**Goals of Lab:** The goal of this lab is for students to learn about various brain structures and their respective functions through weekly lectures and dissections. The course will provide an overview of the cellular mechanisms involved in nervous system function and permit students to gain hands-on experience performing sheep brain/eye dissections. Students will have the opportunity to evaluate and discuss several theories and research techniques and will give presentations on neuroscience or biopsychological research topics related to the class.

**Recommended Text:** Cooley, R. K., & Vanderwolf, C.H. (2001). *The Sheep Brain: A Basic Guide*. A.J. Kirby Co.: London.

**Attendance & Participation:** Material covered in lab will be the basis of quizzes and exams, so you are highly encouraged to attend lab. Attendance during dissections is especially essential because these will be your **ONLY** chance to use the sheep brain and eye. It is not possible to repeat missed dissections during a later lab. If you know you will be absent for a class ahead of time, talk to me and I may be able to arrange for you to attend another lab section.

**Lab Practical Exams:** Practical exams are 40% of your grade in this lab. These exams consist of identification as well as questions regarding the function of pinned brain structures. The Lab Practical Exams cannot be made up at a later date. The nature of the exam does not allow it to be reproduced or preserved. Practical 1 covers Brain Tours I & II and is worth 15% of your grade. Practical 2 is a cumulative final and is worth 25% of your grade.

Prior to each practical exam, I will administer “mock practicals” that will allow you to gain exposure as to how the actual exam will be administered. Although these practices will not be graded, if you attend, you will *significantly* increase your chances of getting a good grade on the real practical.

**Quizzes:** There will be 2 quizzes (each worth 10% of your grade), based on lecture material covered in lab. These quizzes will not require identification of brain structures as observed through dissection. Quiz questions can take the form of multiple choice, true/false, fill-in-the-blanks, labeling a diagram, and/or short-answer format. The quizzes are administered during the first few minutes of class. Students will have a maximum of 30 minutes to complete the quiz. Once the time is up you must turn in the quiz. If you are late to class or have missed the quiz, you will **NOT** be able to make it up.

**Lab Reports:** Students will complete four lab reports (each worth 10% of your grade) that cover (1) action potential simulations, (2) color perception, (3) histology and behavioral neuroscience methods, and (4) electroencephalography (EEG) and cognitive neuroscience methods. The lab reports will be provided on Blackboard and must be submitted by the specified due date. Late reports will not be graded and will receive a 0.

**Policy Regarding Late Assignments:** Permission to postpone a quiz or to turn in an assignment late will only be given for very important and acute reasons. The student must obtain my prior consent to postpone an assignment, including quizzes, or has written medical documentation for absence from a quiz or other assignment. Any documentation required for excused absences **MUST** be turned in by the following lab period.

**The GMU Honor Code will be Strictly Enforced:** Students are required to complete their own work – plagiarism, cheating, and copying other students’ work will not be tolerated. Cheating and plagiarism will be reported to the University Honor Board and/or penalized. Information that is used from an outside source must be cited in correct APA format. I reserve the right to enter a failing grade for any student found guilty of an honor code violation.

**Official Communications via GMU E-Mail:** Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account, and are required to activate that account and check it regularly.

**Class Cancellation Policy:** In the event that class is cancelled, I will notify students via email and post an announcement on Blackboard. In addition, I will notify students if any changes are made to the course schedule.

**Technology Statement:** Required knowledge of technology for this course includes ability to retrieve handouts sent via email to your GMU address or posted on Blackboard (mymason.gmu.edu). Occasionally I may use computer programs or the Internet in class to present demonstrations of relevant material. You may also wish to use websites provided by me to study for the lab practical exams.

**Students With Disabilities:** If you are a student with a disability and you need academic accommodations please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through the DRC.

**Selective Withdrawal Period:** Undergraduate Degree seeking students may request a maximum of three-selective withdrawals during their entire undergraduate career. Before/If you decide that you would like to selectively withdraw from the course, please talk to your adviser and/or me to verify that it is the best decision for you.

**Important Dates:** to find out more information on the add/drop dates, or general information about the academic calendar, visit <http://registrar.gmu.edu/calendars/>.

2 Quizzes	20% (10% each)
Lab Practical I	15%
Lab Practical II (semi-cumulative)	25%
4 Lab Reports	40% (10% each)

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TOTAL	100%
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A+ (97 – 100%);    A (93 – 96%);    A- (90 – 92%)    B+ (87 – 89%);    B (83 – 86%);    B- (80 – 82%)  
 C+ (77 – 79%);    C (73 – 76%)    C- (70 – 72%)    D (60 – 69%)    F (59% and below)

Date	Tentative Course Schedule:	Assignments Due:
Jan. 21	Introduction / Neurophysiology	
Jan. 28	Action Potential, Postsynaptic Potential Lab Report 1 Demonstration	
Feb. 4	<b>QUIZ 1</b> Brain Tour 1 (Whole Brain Structures)	<b>Lab Report 1</b>
Feb. 11	Brain Tour 2 (Cranial Nerves)	
Feb. 18	Mock Practical / Study Session for Lab Practical 1	
Feb. 25	<b>Lab Practical I (Brain Tours 1 &amp; 2)</b>	
Mar. 3	Visual System (Sheep Eye Dissection) Lab Report 2 Demonstration	
Mar 10	<b>NO CLASS - SPRING BREAK</b>	
Mar. 17	<b>Quiz 2 (Visual System)</b> Midsagittal Dissection	<b>Lab Report 2</b>
Mar. 24	Coronal Dissections	
Mar. 31	Mock Practical / Study Session for Lab Practical II	
Apr. 7	<b>Lab Practical II (semi-cumulative)</b>	
Apr. 14	Histology and Behavioral Neuroscience Methods	<b>Lab Report 3</b>
Apr. 21	Intro to Electroencephalography (EEG)	<b>Lab Report 4</b>