Physiological Psychology Lab
PSYC 373 Section 202
Spring 2018

Instructor: Aaron Hunt, M.S.
E-mail: ahunt20@gmu.edu
Class Time: M 3:30 PM – 5:20 PM
Office Hours: T 1:45 PM – 2:45 PM/appointment (prefer)
Class Location: DKH 2074
Office Location: DKH 2037

Goals of Lab: The primary goal of this lab is for students to become familiar with brain structure and function through lectures and dissection. The course will begin with a broad survey of cellular neuroscience and then proceed into sheep brain and eye dissections, paying particular attention to brain structures and functional anatomy. The applied portion of the course will be a broad survey of behavioral neuroscience and histology/microscopy.

Recommended (not required) text: Cooley, R. K., & Vanderwolf, C.H. (2001). The Sheep Brain: A Basic Guide. A.J. Kirby Co.: London.

Attendance & Participation: The material covered in lab will be the basis of quizzes and exams so attendance is highly encouraged. Attendance during dissections is particularly important because these classes will be your only time to dissect the sheep brains & eyes.

Lab Practical Exams: These exams consist of identification and/or questions regarding pinned brain structures. **There will be no make-ups for a missed practical unless you have obtained my approval.** You MUST let me know at least a week in advance that you will miss a practical. If you are sick or have an emergency, then you must let me know ASAP. The nature of the exam does not allow it to be reproduced or preserved. Practical I will cover Brain Tours I & II and is worth 50 points. Practical II is a cumulative final and is worth 100 points.

I will administer what are called "mock practicals" during the classes that are study sessions. These will not be graded; however, if you attend, you will *significantly* increase your chances of getting a good grade on the real practical.

Quizzes: The quizzes will be based on lecture material covered in class. 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. Quizzes start the first minute of class and are timed. Once the time is up you must turn in the quiz. If you are late to class or have missed the quiz then you will **NOT** be able to make it up.

Lab Reports: Students will complete three (3) lab reports that concern (1) action potential simulations, (2) color perception and blind spots, and (3) behavioral neuroscience and histology. These lab reports will be due via a provided Blackboard link at the start of class. Reports that are not submitted before the deadline 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. Any make-up quiz will be structured like the original, but the content will be different. The student must obtain written medical documentation or provide justification for an absence from a quiz or other assignment. Any documentation required for excused absences MUST be turned in by the following lab period. If this documentation is not received in a timely manner, then the assignment will not be graded and will receive a 0.

Policy Regarding "Curving" and Extra Credit: Curving and extra credit will be left to my discretion. If I decide to give extra credit, this will be announced to the entire class. I do not assign individual extra credit assignments. If you ask me for an extra credit assignment I will say no.

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. Information that is used from an outside source must be cited in correct APA or JNeurosci format. Cheating and plagiarism will be reported to the University Honor Board.

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. In the event that class is cancelled, then I will notify students via email, and I will reorganize the class schedule in order to address all material. One class has been allocated as a make-up day. Due dates for quizzes, practicals, and/or assignments will be changed if necessary.

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.

Please note that this course requires active participation in dissection of animal tissue (brain and eye) preserved in fixative as well as potential carcinogenic/teratogenic chemicals that are commonly used in histology. If you have a concern about this, or cannot participate for some reason, please meet with me as soon as possible.

Selective Withdrawal Period (undergraduate students only): 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.

3 Quizzes (30 points each)	90 points
Lab Practical I	50 points
Lab Practical II (cumulative)	100 points
3 lab reports (20 points each)	60 points
TOTAL	300 points

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)

Important dates:

First day of classes: January 22nd
Last day to add classes: January 29th
Last day to drop with no tuition penalty: January 29th
Last day to drop with 33% tuition penalty: February 12th
Final drop day (with 67% tuition penalty): February 23rd
Selective withdrawal period (undergraduate only): February 26th – March 30th
Last day of classes: May 5th
Exam period: May 9th – May 16th

You are responsible for any/all announcements and syllabus modifications made by me through Blackboard announcements.

Date	Tentative Course Schedule:	Assignments Due:
January 22nd	Introduction: Neurophysiology (lecture 1)	
January 29th	Action potential/postsynaptic potential (lecture 2) Introduction to MetaNeuron simulation	
February 5th	**Quiz 1:** Neurophysiology; AP/PSP (lectures 1 & 2); No MetaNeuron material Brain tour I: Surface identification & dura mater dissection (lecture 3)	**Lab report 1 (MetaNeuron):** due via BB no later than 10:30 AM
February 12th	Brain tour II: Cranial nerves dissection (lecture 4)	
February 19th	In-class review/mock practical (lectures 3 & 4)	
February 26th	**Lab practical I (lectures 3 & 4)**	
March 5th	Visual system & sheep eyeball dissection (lecture 5)	
March 12th	*NO CLASS – Spring Break*	
March 19th	**Quiz 2:** Visual system (lecture 5) Midsagittal dissection (lecture 6, part 1)	**Lab Report 2 (Visual perception):** due via BB no later than 10:30 AM
March 26th	Coronal dissection (lecture 6, part 2)	
April 2nd	In-class review/mock practical (primarily lectures 5 & 6)	
April 9th	*NO CLASS* – Society for Neuroscience Conference	
April 16th	**Lab Practical II (CUMULATIVE: lectures 3 – 6)**	
April 23rd	Behavioral neuroscience & histology (lecture 7)	Read these before class: Nestler & Hyman, 2010 (pgs 1161 – 1163 and Table 1 on 1164 only) Histological Techniques PDF
April 30th	**Quiz 3:** Behavioral neuroscience & histology Lab activity: Histology staining & behavioral models of neurological diseases/disorders	
May 7th	No class	**Lab report 3 (Behavioral Neuro/Histo) and optional extra credit:** due via BB no later than 5:20 PM