

Behavioral Neuroscience Laboratory

PSYC/BIOL 3142-002

Spring 2009 – Thursdays 5:30-8:20 – Rm LS 428

Instructor: Torry Dennis
Office: 425 Life Sciences
Office Hours: Thursdays - 4:00-5:00pm or by appointment
Email: tdennis@uta.edu

Course Description

Research methodologies employed in the study of the biological basis of behavior. 1 hour credit, granted only once.

Course Learning Goals and Objectives

Upon completion of this course, students should be familiar with the methodological underpinnings of the field of behavioral neuroscience (and hopefully the science behind it too!). We will cover a wide range of topics from individual neurons to brain systems. This lab will focus on the more practical side of scientific inquiry. A detailed account of what will be covered during the semester can be found in the schedule on the back page.

Requirements

Students need to have either completed PSYC 3322, or concurrently enrolled.

PSYC 3142 Prerequisite: PSYC 2442 or PSYC 2444

BIOL 3142 Prerequisite: BIOL 1441 & BIOL 1442 or Department consent.

Academic Dishonesty

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

“Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Series 50101, Section 2.2)

Personal Policy: The first instance of academic dishonesty of any kind will result in a **zero on the assignment** and a **report to the Office of Student Conduct**. A second instance of academic dishonesty will result in a **zero for the class** and **another report to the Office of Student Conduct**. In an effort to best address the issue of plagiarism, **you will be required to submit a copy of any papers that are written for the class to the instructor via WebCT.**

Required Readings

No book is necessary for the class. All readings necessary will be supplied for you either on WebCT or in class.

Attendance Policy

While I cannot force you to attend class, it is highly recommended that you do. Attendance will be taken 10 times at random throughout the semester and will be counted toward your grade. You will also be responsible for any material covered while absent. If you are absent, my best advice is to read the PowerPoint posted from class thoroughly and consult your classmates on the lecture/demonstration.

Drop Policy

Please refer to university drop policy. Also, please also refer to the academic calendar for drop dates (<http://www.uta.edu/utacadcal/>).

Americans with Disabilities Act

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112 – The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans With Disabilities Act – (ADA), pursuant to section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide “reasonable accommodation” to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

Student Support Services Available

The University supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

E-Culture Policy

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

Grade Grievance Policy

The University Grade Grievance Policy will be followed. (See Grade Grievance Policy in the Undergraduate Catalog.)

Assignments

An outline of each assignment (presented on the first day of class) will be made available to the students via webct. More detail about the individual assignments (such as rubrics) will be provided well in advance as the semester progresses.

A note on quizzes: **THERE WILL BE NO MAKEUP QUIZZES.** Because of this, I will allow you to drop 2 of the 8 quizzes for any reason. The highest 6 quizzes will count towards your grade.

Grading

Assignments	Points
Plagiarism Tutorial	20
Quizzes (6 out of 8)	50 each (300)
Proposal	130
Proposal Presentation	20
Article Critiques (2)	100 each (200)
Attendance	30
TOTAL	700

Letter Grade	Percentage	Total Points Needed
A	89%	623-700 points
B	79%	553-622 points
C	69%	483-552 points
D	59%	413-482 points
F	< 59%	000-412 points

Schedule

Date	Topics	Anything Due?	Quiz Schedule
1/22/09	Introduction: <i>What is Expected?</i> Plagiarism: <i>Don't do it!</i> Literature Review: <i>A textbook isn't a primary source?</i>	X	X
1/29/09	Experimental Design: <i>Is it really that important?..... YES!!!</i> Statistics: <i>Overview</i>	X	X
2/5/09	Behavioral Methodology: <i>The way we do the things we do</i>	Plagiarism Tutorial	Quiz 1 Plagiarism, Experimental Design, Statistics
2/12/09	Action Potential: <i>Will be on the Quiz</i> Synaptic Transmission: <i>Not a part for your car</i> Electrophysiology: <i>Guest Lecturer</i>	Article Critique 1	Quiz 2 Behavioral Methodology
2/19/09	Neuropharmacology In-class Demonstration: <i>Mouse Party</i> Lab Day: <i>Pharmacology & Behavior</i>	X	Quiz 3 Action Potential, Synaptic Transmission, Electrophysiology
2/26/09	Major Brain Areas and Function Lab Day: <i>Sheep Brain Dissection</i>	X	Quiz 4 Neuropharmacology
3/5/09	Surgical Manipulations of the Brain Lab Day: <i>Stereotaxic Surgery Demonstration</i>	Article Critique 2	Quiz 5 Major Brain Areas & Functions
3/12/09	Diseases of the brain How disease states are modeled	X	Quiz 6 Surgical Manipulations of the Brain
3/19/09	SPRING BREAK!!!!	X	X
3/26/09	Self-Stimulation of the Brain Q&A About Proposal/Presentation Lab Day: <i>Self-Stimulation of the brain Demonstration</i>	X	X
4/2/09	Histology: <i>I've got the tissue, now what?</i> ELISAs, RIAs, & Blots: <i>oh my!</i>	Proposal Rough Draft (Optional)	Quiz 7 Diseases of the Brain Self-Stimulation of the Brain
4/9/09	Work on Presentations in Class	Proposal Paper	X
4/16/09	Proposal Presentations	X	X
4/23/09	Proposal Presentations	X	X
4/30/09	Proposal Presentations Last Day of Class!!!	X	Quiz 8 Histology Lecture/Final
5/7/09	No Class: <i>Go Study for your finals</i>	X	X