**Biological Neurobiology: The Cellular Organization of Natural Behavior**

by Thomas J. Carew

http://www.unlv.edu/faculty/debelle/biol475/

**Course Description**

*Neurobiology* (BIOLOGY 475), is a senior level 3-credit course intended for biology majors, focusing on the neural organization of behavior. We will examine how animals have evolved specific neural solutions to problems posed to them by their environments. Course material will be derived mainly from the text (Carew), which is divided into four sections: (1) introduction to behavior and nervous system physiology, (2) sensory worlds, (3) motor strategies, and (4) behavioral plasticity. Additional reading to supplement the text will be provided by the instructor.

*Neurobiology* will be a paperless course whenever possible, with all materials (excluding books and exams) available on the course web page. There you will find the calendar of events, lecture notes, exam solutions, grades and other relevant material. Students are responsible for acquiring all course information from this source, as we will not provide printed copies of any documents (including this one).

**Objectives**

Students successfully completing this introductory *Neurobiology* course will possess a fundamental understanding of the neural basis of animal behavior. Since the course will be taught from an investigator’s perspective, students will become familiar with modern approaches used in studying nervous system structure and function, ranging from analysis of whole animal behavior to molecular biology. Assessment of these objectives will be based on exams only.

**Instruction**

Class attendance is compulsory. Randomly administered quizzes during lecture periods will reinforce this habit. Assigned readings for each lecture are listed in the course calendar and should be completed before class. Quizzes will encourage this habit as well. Quizzes will be based on a rudimentary understanding of the literature, reflecting material to be covered in detail that day in class. It is strongly recommended that students form study groups to assist in comprehension of course material. Students...
wishing assistance in establishing or joining a study group or in locating a suitable venue for group meetings should contact the instructor.

EXAMS

The first midterm exam will be given during a regular lecture period. The second midterm will be a take-home exam and available on the course web page only. The completed exam must be submitted electronically to the instructor. Midterm exams may be taken as makeup exams only if approved by the instructor 1 week prior to the exam date. The format of a makeup exam is at the discretion of the instructor. The final exam will be held in CBC A108 from 6:00 to 8:00 PM on Tuesday, May 8th during final exam week. There will be no makeup final exam.

INSTRUCTOR’S RESPONSIBILITIES

1. to be prepared for each lecture;
2. to present the most important information in a clear and concise fashion;
3. to be available outside of the class to answer questions;
4. to reply to electronic mail promptly; and
5. to return assigned homework and exams in a timely fashion.

STUDENT’S RESPONSIBILITIES

1. to attend classes;
2. to read assigned literature before lectures;
3. to study regularly and thoroughly for exams;
4. to seek assistance from the instructor when needed;
5. to check the web page regularly;
6. to bring a black pencil, calculator and photo ID to all exams; and
7. to provide medical, legal or other official documentation to support unavoidable absence from classes or exams.

GRADES

Final grades will be based on a standard percentage scale, but may be curved or otherwise adjusted at the discretion of the instructor.

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<td>Exam</td>
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<td>Midterm 1</td>
<td>86 – 89 A–</td>
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<td>Midterm 2</td>
<td>82 – 85 B+</td>
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<td>Final</td>
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<td>Quiz</td>
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DISABILITY

If you have a documented disability that requires assistance for this course, please contact the Disability Resource Center (Reynolds Student Services Complex 137, telephone 895-0866 or TDD 895-0652) to coordinate your assistance.
RELIGIOUS HOLIDAYS

Students who expect to miss any aspect of this course because of a religious holiday must notify the instructor in writing by Monday, September 1st. In cases of such schedule conflicts, students will be permitted to write a makeup exam the following day.

CHEATING, PLAGIARISM & ACADEMIC DISHONESTY

“No form of academic dishonesty is acceptable. While maintenance of an atmosphere of academic integrity is the responsibility of all, the faculty is principally responsible for enforcement of these standards. Academic dishonesty includes any act that violates the academic processes of the university. These acts include, but are not limited to, cheating on an examination, stealing examination questions, substituting one person for another at an examination, violating the procedures of a national or state examination, falsifying data, destroying or tampering with or stealing a computer program or file, and plagiarizing (using as one’s own the ideas or writings of another) (UNLV Undergraduate Catalogue, Fall 2004 – Spring 2006, pp. 58-9). Students who cheat will be expelled from the course, receive a grade of “F”, and receive additional disciplinary action as outlined in the University and Community College System of Nevada document, Rules and Disciplinary Procedures for Members of the University Community.

IMPORTANT DATES

- first class: T.01.16
- final registration: M.01.22 @ 5 PM
- first midterm exam: R.02.22
- drop (no penalty): F.03.30 @ 5 PM
- second midterm exam due: R.03.29 @ 3 PM
- third & final exam: T.05.08 @ 6 PM