

Psychology 3061: Introduction to Biological Psychology
Summer 2009
1:15 p.m. – 3:55 p.m., Tuesdays and Thursdays, Elliott Hall N119

Instructors:

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Office Hours: 12-1, Tuesdays and Thursdays, or by appointment.

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Office Hours: 4-5 Mondays and Wednesdays, or by appointment.

Course Description and Objectives: This course will: 1) Provide an overview of neuroanatomy, neurophysiology, and basic principles of biopsychological investigations. 2) Review current knowledge of the biological bases of a wide range of phenomena (including sensation/perception, learning/memory, language, stress, and sleep), and neurological and psychiatric disorders (including depression and drug abuse). Students should become comfortable with the basic details of brain function, gain a general understanding of the biology of behavior and neurological/psychiatric disorders, and develop skills to understand techniques and evaluate results of neurobiological and behavioral experiments.

Prerequisites: Students are expected to have taken introductory psychology and introductory biology.

Textbook: Pinel, J. P. J. (2009). *Biopsychology* (7th ed.). Boston, MA: Allyn & Bacon.

Course Webpage: Our course website is implemented using WebVista and can be accessed by logging into your MyU Portal (www.myu.umn.edu). After logging in, click on “My U Space” (which is near the top of the page) and follow the link that says

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Course Plan: Lectures will review some of the topics covered in the readings, but will also include related information that is not covered in the text. Class discussions and videos will supplement some of the lectures. Assigned readings should be completed before class.

Assignments: There will be assignments given periodically throughout the term. These assignments will include several different formats. Examples include in-class quizzes and group activities, homework problems, and online quizzes. Instructions, due dates, and grading criteria will be given in class. The total point value for assignments given throughout the semester will be equal to 25. A hard copy of take home assignments must be turned. E-mailed assignments will not be accepted.

Exams: There will be three multiple choice exams. The first exam will consist of 50 multiple choice questions and will cover Chapters 1-5 of the textbook and the lectures from 6/16-6/30. The second exam will consist of 50 multiple choice questions and will cover Chapters 6-10 and the lectures from 7/2-7/16. The final exam will consist of 75 multiple choice questions and *will be cumulative*. However, the final will emphasize material in Chapters 11-18 and the lectures from 7/21-8/4. On the exams, you will be held responsible for all corresponding course material. Thus, anything covered in the lectures, text book, assignments, or on the course website is considered “fair game” for exam questions.

Grading: Final grades will be based entirely on the three exams and on the assignments. The final grades will be determined as follows:

| | |
|---------------|------------|
| EXAM 1 = | 50 points |
| EXAM 2 = | 50 points |
| FINAL EXAM = | 75 points |
| ASSIGNMENTS = | 25 points |
| <hr/> | |
| Maximum = | 200 points |

The three students with the highest scores of total points will have their scores averaged, and this average will represent a “perfect” score and a grade of 100%. Students will receive a percentage grade based upon this “perfect” score as detailed below:

| | |
|--------------------------------|------|
| 92-100% of the “perfect” score | = A |
| 90-91.9% | = A- |
| 88-89.9% | = B+ |
| 82-87.9% | = B |
| 80-81.9% | = B- |
| 78-79.9% | = C+ |
| 72-77.9% | = C |
| 70-71.9% | = C- |
| 68-69.9% | = D+ |
| 60-67.9% | = D |
| 59.9% or less | = F |

Students who take the course on an S-N basis must earn a grade of at least a “C-“ to pass the course.

Late and make-up policy: You are expected to come to class. Thus, the due dates for take-home assignments are firm. If homework is turned in late without an approved excuse, 10% of the total points possible for the assignment will be deducted for each day that the assignment is late. Similarly, make-up for exams and for in-class assignments will only be given under very unusual circumstances. These circumstances include, but are not necessarily limited to: verified illness, participation in athletic events or other group activities sponsored by the University, serious family emergencies, subpoenas, jury duty, military service, and religious observances. It is the responsibility of the student to notify the instructor of such circumstances as far in advance

as possible. **Therefore, if you have a FORSEEABLE ABSENCE, you must obtain permission from the instructor to make-up the exam or assignment at least 48 hours before the scheduled exam or assignment. If you have an UNFORSEEABLE ABSENCE, you must notify the instructor no later than 48 hours after the absence occurred.** In either case, the instructors reserve the right to request written documentation of the reason for an absence, and we may withhold your opportunity to make up the missed exam or assignment until we have received and approved this documentation.

Additional Grading Information:

The University Senate of the University of Minnesota requires that "every course syllabus shall include the grading standards set forth in the Uniform Grading Policy adopted by the University Senate and the Senate policy on amount of academic work expected per credit."

University Grading Standards

- A achievement that is outstanding relative to the level necessary to meet course requirements.
- B achievement that is significantly above the level necessary to meet course requirements.
- C achievement that meets the course requirements in every respect.
- D achievement that is worthy of credit even though it fails to meet fully the course requirements.
- S achievement that is satisfactory, which is equivalent to a C- or better.
- F (or N) Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.
- I Incomplete. Assigned at the discretion of the instructor when, due to extraordinary circumstances, e.g., hospitalization, a student is prevented from completing the work of the course on time. Requires a written agreement between instructor and student.

Credits and Workload Expectations

For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full semester) necessary for an average student to achieve an average grade in the course. Thus, a student taking a 3-credit course should expect to spend nine hours a week on coursework. Because this is a summer course, we have 8 weeks instead of a 15-week "full semester" to cover all of the course material. **Thus, you should expect to spend up to 18 hours a week on coursework during the summer session.**

Academic Dishonesty:

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action. The University Student Conduct Code defines scholastic dishonesty as follows:

Scholastic Dishonesty: Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering forging , or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.

Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the entire course and referral to the Office of Student Conduct and Academic Integrity. If you have any questions regarding the expectations for a specific assignment or exam, ask.

Students with Disabilities

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have documented disability conditions (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Services and their instructors for a confidential discussion of their individual need for academic accommodations. Disability Services is located in Suite 180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling 612-626-1333 voice or TTY.

Changes to This Syllabus

This syllabus is subject to change as the needs of the course demand. It is the student's responsibility to become informed of any changes announced in class or on the course website.

Schedule of Lectures and Readings

| Date | Topic | Assigned Reading | Lecturer |
|----------|---|--|-----------|
| Tu 06/16 | Introduction | Chapter 1 | Engelmann |
| Th 06/18 | Neuroanatomy | Chapter 3 | Engelmann |
| Tu 06/23 | Neural Conduction | Chapter 4 | Engelmann |
| Th 06/25 | Synaptic Transmission and Pharmacology | Chapter 4 | Engelmann |
| Tu 06/30 | Research Methods | Chapter 5 | Engelmann |
| Th 07/02 | EXAM 1 (1 hour) Sensation/Perception Preview | | Dimova |
| Tu 07/07 | Vision | Chapter 6 | Engelmann |
| Th 07/09 | Other Senses | Chapter 7 | Dimova |
| Tu 07/14 | Movement | Chapter 8 Chapter 10 (p. 245 – 247) | Engelmann |
| Th 07/16 | Development and Plasticity | Chapter 9 Chapter 10 | Dimova |
| Tu 07/21 | EXAM 2 (1 hour) Learning and Motivation Preview | | Engelmann |
| Th 07/23 | Learning, Memory, Cognition, and Language | Chapter 11 Chapter 16 | Dimova |
| Tu 07/28 | Motivation (I): Eating; Sexual Behavior | Chapter 12 Chapter 13 | Dimova |
| Th 07/30 | Motivation (II): Sleep and Rhythms; Drug Abuse | Chapter 14 Chapter 15 | Engelmann |
| Tu 08/04 | Motivation (III): Psychological Disorders; Final Review | Chapter 18 | Dimova |
| Th 08/06 | FINAL EXAM (2 hours) | | |