Biopsychology

PSY 350

MWF 10-1050am

Fall Semester 2019

Professor Information:

Name: Dr. Nathan Sparkman

Department: Psychology

Office: ED 215P

Office Phone: 936-468-4402 *- email is better

e-mail: sparkmannl@sfasu.edu

Office hours: MW 11-1130am; TH 2-315pm; F 11-12

Required Text:


Course Description:

Examination of relationships between behavior and underlying physiological mechanisms. Aspects covered include neural conduction, sensory receptor mechanisms, learning and memory, and other aspects of higher cortical functioning in both humans and animals.

Program Learning Outcomes: PLO  

Proficiency Level

The student will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Advanced
The student will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.

The student will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.

The student will understand and apply psychological principles to personal, social, and organizational issues.

The student will value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.

STUDENT LEARNING OUTCOMES

By the end of this course, students should be able to...

1. understand and communicate theories pertaining to biopsychology
2. identify different research methods utilized in the field of biopsychology
3. define normal and abnormal brain functioning
4. discuss how major biopsychological principles, theories, and findings relate to everyday life and real-world problems
COURSE REQUIREMENTS:

Grading Policy:

Final grades for the course are based on the coursework described below. All grades will be posted in the D2L website.

Evaluation and Grading:

4 exams (100pts each)

Lab quiz (30pts)

Assignments (points varies)

Your course grade is calculated as the percentage of total points earned in the course.

Total Points Earned/Total Points Available = % of Points Earned

Grade = % of Points Earned

A 90 - 100 percent
B 80 - 89 percent
C 70 - 79 percent
D 60 - 69 percent
F less than 60 percent

Unit Tests: There will be 4 closed-book unit tests. Each test is comprised of material from the lectures and assigned readings/media/activities and assignments. The tests will be taken during class time (and during the final exam time). Students will be given at least one-week notice of the exact test date. Each exam is of equal weight (100pts).

Lab quiz: The lab practical will take place following the brain lab and students will be required to identify various anatomical structures and their functions from anatomical photos. Students with objections may complete the activity using an atlas and a plastic anatomical model. (30pts)
Assignments: In class and take home assignments will be weighted in accordance with assignment length and required effort. In class assignments require that you be there to complete the activity and may be unannounced. Absent students will miss out on the activity and will not receive credit. Students should inform the instructor prior to an absence to ensure that are able to complete an alternate assignment.

Guidelines for the Course

1. Late and Make-Up Test/Work Policy

Late work should be turned in promptly and will not be accepted if it is late by more than one class period. Late work will be penalized. If a student is so late for a test that another student has completed the test and left the room, the student will not be permitted to start the test at that time. If a student misses a test, make-up tests will be scheduled in the event that documentation is provided to the instructor showing that the student was incapacitated during the time in which the test was offered. Students must provide documentation of a University-recognized excused absence to be eligible to take a make-up test. Make-up tests must be completed within a week. In order to do this, the student must contact the instructor, provide documentation of a University-recognized absence, and schedule a time to make-up the test. It is the student’s responsibility to contact the instructor. If a student fails to do so or fails to meet with the instructor in a timely manner (1 week), he/she forfeits his/her opportunity to complete the work and grade of zero will remain in the grade book.

2. Withheld Grades - Semester Grades Policy (A-54) Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

3. Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the
components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. All forms of academic dishonesty will be dealt with seriously and immediately. Please respect SFASU, yourself and me enough not to participate in academic dishonesty.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

**NOTE:** ALL WORK IN THE COURSE HAS THE POTENTIAL TO BE ELECTRONICALLY CHECKED FOR PLAGARISM. The check includes all known published works in the public sphere, as well as classmates' and students' work at other institutions.

4. **Student Behavior**

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Students who do not attend class regularly or who perform poorly on coursework may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

5. **Students with Disabilities**

These disabilities could consist of physical, psychiatric, and/or learning impairments. To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human
Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

6. Financial aid and student class attendance

In compliance with federal regulations governing financial aid, instructors are required to report students who have never attended or participated in class. Attendance can be defined by physical attendance or participation in an academically related activity such as submission of an assignment, examination, or participation in group or online discussion. Instructors may use key assessment points such as projects, papers, discussions, etc. as benchmarks for participation. Students marked as never attended will be dropped from class if they receive financial aid. Federal laws for Financial Aid have dictated that any student who is not attending class will not receive financial aid. In order to comply, any student marked as never attended will be dropped and financial aid altered. Instructors will have to verify enrollment if a student is incorrectly marked as never attended upon request by the student.

Course Schedule and Reading Assignments

“Biopsychology” (3 credits) is designed to introduce students to the field of biopsychology by covering the relationships between behavior and underlying physiological mechanisms including neural conduction, sensory receptor mechanisms, learning and memory, and other aspects of higher cortical functioning in both humans and animals. The course typically meets 150 minutes a week in two 75-minute segments or three 50-minute segments for 15 weeks, and also meets for a 2-hour final examination period. Students typically have significant weekly reading assignments, writing assignments, are expected to take regular tests, and a final examination. These activities average at a minimum 6 hours of work each week to prepare outside of classroom hours. Online course sections contain extensive written content that includes the same information students in a face-to-face lecture sections receive, requiring students to engage the online modules for at least three hours per week. For every hour a student spends engaging with the online content, he/she spends at least two hours completing associated activities and assessments.
Schedule of topics covered and assignments are listed below. You are expected to have read and be familiar with assigned readings prior to class. Assignments will be made throughout the course and may include inclass activities and homework.

*Note: All dates and assignments are tentative and the professor reserves the right to change them.*

<table>
<thead>
<tr>
<th>Week #</th>
<th>Lecture Topic/Chapter (Myers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction/ THE MAJOR ISSUES</td>
</tr>
<tr>
<td>2</td>
<td>NERVE CELLS AND NERVE IMPULSE</td>
</tr>
<tr>
<td>3</td>
<td>NERVE CELLS AND NERVE IMPULSES</td>
</tr>
<tr>
<td>4</td>
<td>SYNAPSES</td>
</tr>
<tr>
<td>5</td>
<td>SYNAPSES</td>
</tr>
<tr>
<td>6</td>
<td>Exam 1</td>
</tr>
<tr>
<td>7</td>
<td>CHAPTER 4 / Brain Lab ANATOMY OF THE NERVOUS SYSTEM</td>
</tr>
<tr>
<td>8</td>
<td>DEVELOPMENT AND PLASTICITY OF THE BRAIN</td>
</tr>
<tr>
<td>9</td>
<td>LAB QUIZ</td>
</tr>
<tr>
<td>10</td>
<td>THE BIOLOGY OF LEARNING AND MEMORY</td>
</tr>
<tr>
<td>11</td>
<td>continued</td>
</tr>
<tr>
<td></td>
<td>Sleep and Wakefulness</td>
</tr>
</tbody>
</table>
Exam 3

Cognitive Functions

MOOD DISORDERS AND SCHIZOPHREНИA

continued

Exam 4