

# **Master Course Syllabus**

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <u>https://catalog.uvu.edu/</u>

Semester: Spring	<b>Year:</b> 2025
Course Prefix: PSY	Course and Section #: 2710-006
Course Title: Introduction to Brain and Behavior	Credits: 3

### **Course Description**

Introduces neuroanatomy and neurophysiology. Includes how neurons communicate to coordinate various functions and behaviors. Addresses research methods used to study the brain and the nervous-system mechanisms to control functions and behaviors.

# **Course Attributes**

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- U Writing Enriched Graduation Requirements
- □ Discipline Core Requirements in Program
- Elective Core Requirements in Program
- □ Open Elective

Other: Click here to enter text.

### **Instructor Information**

Instructor Name: Chris Anderson, PhD

### **Student Learning Outcomes**

- 1. Explain a basic understanding of neuroanatomy and neurophysiology.
- 2. Summarize what is currently known about the nervous-system mechanisms that underlie behavior.
- 3. Apply scientific methods that are used to produce knowledge about the nervous system mechanisms that underlie behavior.

4. Define the capabilities of the brain.

# **Course Materials and Texts**

An Introduction to Brain and Behavior, (6th Edition) by Brian Kolb and Ian Q. Whishaw

# **Course Requirements**

Course Assignments, Assessments, and Grading Policy Tests and Assignments **Three tests (60% of grade)**: Tests will be multiple-choice, closed note, time-limited, and administered online through Proctorio. There will be a study guide and practice test for each test that you are encouraged to take since it will give you a close approximation of your readiness for the test.

Attendance (20% of grade): Since this is an in-person class, physical attendance is a central component of this educational experience in which there will be many class activities and discussions which are not available online. You must initial the roll to receive credit. However, it is also normal to have events and important cultural celebrations during the semester. Consequently, there is flexibility of two free absences. Beyond two free absences, you can make up an additional two absences by completing a make-up assignment. If you have encounter several absences due to medical or family emergencies, you may be able to make up additional absences by contacting the instructor.

Assignment Portfolio (10% of grade): You should complete 10 assignments/experiences of your choosing during the semester. These assignments are graded as pass/fail where you are expected to pass if you follow the assignment description and may lose points for not following the assignment description.

**Final Exam (10% of grade):** The department prepares a final exam for this class. A study guide will be available and we will review during class. You must receive at least a 50% on your raw score to pass the class.

**Grading:** (Although the grading guidelines below are standard, they can be somewhat arbitrary. Consequently, at the instructor's discretion these grading thresholds may be lowered if a very low percentage of students reach the 'A' range).

A: 94-100 A-: 90-93.9 B+: 87-89.9 B: 84-86.9 B-:80-83.9 C+:77-79.9 C: 74-76.9 C-:70-73.9 D+:67-69.9 D: 64-66.9 D-:60--63.9 F(E): 59 or below.

### **Required or Recommended Reading Assignments**

An Introduction to Brain and Behavior, (6th Edition) by Brian Kolb and Ian Q. Whishaw

### General Description of the Subject Matter of Each Lecture or Discussion

Week 1: Introduction to brain and behavior, major structures of the brain and nervous system

- Week 2: Basic anatomy of the nervous system
- Week 3: Neurons and glial cells
- Week 4: Neurons and glial cells
- Week 5: Review to be tested on aforementioned topics

Week 6: The action potential, axons, dendrites, membrane potentials, excitatory and inhibitory signals

Week 7: Continuation of action potentials, dendrites, membrane potentials

Week 8: Neurotransmitters, synapses, receptors

Week 9: Continuation of neurotransmitters, synapses, receptors

Week 10: Test 2 Review and test

- Week 11: How drugs/medications affect the brain, classes of drugs
- Week 12: Researching the brain and behavior, experiments, research design
- Week 13: Development of the brain and nervous system, developmental milestones, aging, dementia
- Week 14: Test 3 Review and Test
- Week 15: Final exam review and final exam

### **Required Course Syllabus Statements**

### **Generative AI**

Artificial intelligence has made tremendous progress recently. It is likely to become an integral part of many careers and professions. Consequently, it is important to practice using it properly in college. You should always seek to understand the rules surrounding A.I. in your classes and for various assignments.

In this class, proper use of A.I. includes using it to brainstorm ideas about a topic and to check your spelling and grammar. Improper uses include using prompts to generate an entire written passage for an assignment or trying to claim that something is your own original work when it has been generated by A.I.

Certain assignments will require a statement to address if and how you used AI to complete the assignment. If you are unsure about how to properly use A.I. for an assignment, ask the professor in class or send an email. UVU does use A.I. detection services and I report any academic dishonesty to the office of Academic Affairs.

### Using Remote Testing Software

 $\Box$  This course does not use remote testing software.

 $\boxtimes$  This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

# **Required University Syllabus Statements**

### Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancyrelated conditions may contact UVU <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at <u>DHHservices@uvu.edu</u>

DHH is located on the Orem Campus in BA 112.

### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their <u>rights and responsibilities</u>. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541</u>: <u>Student</u> <u>Code of Conduct</u>.

### **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <u>accessibilityservices@uvu.edu</u>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.