

PSYC/BIOL 3322-001: Brain and Behavior

Summer 2024

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Office Hours: By Appointment Only

Time and Place of Class Meetings: M-TH; 1:00 pm – 3:00 pm; LS-122

Description of Course Content:

An introduction to the anatomical structures and physiological processes that determine behavior. Topics include evolution, genetics, research methods in behavioral neuroscience, motivation and emotion, sensation and perception, learning and memory, lifespan development, cognition, psychological disorders, and other complex behaviors.

Student Learning Outcomes:

- Define and explain the biological foundations of behavior, including theories, history, and research methods.
- Describe the evolution and development of the nervous system – neuroanatomy, neurophysiology, neurotransmission, and neuroendocrinology.
- Identify the structures and function(s) that underlie sensations, perceptions, and motor control.
- Identify and discuss the regulation of behavior, including motivation and emotion, and biological rhythms.
- Articulate the biological components of learning, memory, and language.
- Describe the biological underpinnings of age-related changes in cognition and socioemotional functioning over the lifespan.
- Examine how biological processes impact health and well-being.

Course Prerequisites:

BIOL 3322 prerequisite: BIOL 1441, 1442. PSYC 3322 Prerequisites: BIOL 1441 or PSYC 1315.

Required Textbook(s) and Other Course Materials:

Kalat, J.W. (2018). *Biological Psychology* (13th ed.). Cengage Learning.
ISBN-10: 1337408204, ISBN-13: 9781337408202

This **textbook is REQUIRED** meaning that you will **need to read and study from it in order to pass this course**. While I understand that purchasing an earlier version of the text can be less expensive, I will be teaching out of the 13th edition because the information contained within is the most current and accurate. Therefore, course content and exam questions are based on the

information contained in the 13th edition. If you decide to purchase an earlier edition of the text, you do so at your own risk. Approximate cost estimate for course materials: \$50.00 - \$136.00. *MindTap is highly recommended as a study tool for this course.*

You can use the following information to decide your **purchase options** for new books:

- The textbook and online material for PSYC/BIOL 3322-001 are available to the **Inclusive Access (IA) program**. Students will be charged for the tuition and fees when registering but have the option to opt-out before the census day and get a refund. The ISBN for Kalat's Biological Psychology MindTap is 9780357035696.
- Special bundle arranged for UTA students: 13th edition loose-leaf edition + MindTap is sold at the UTA bookstore or from www.cengagebrain.com/. Course Key will only work with purchases after a grace period.
- Purchase from other sources

Descriptions of major assignments and examinations:

There are no major assignments but reading the textbook and using MindTap are highly recommended. There will be **THREE in-person examinations**, please bring your own scantron ([Green Form 882-E, 50 on front and 50 on back](#)).

Extra Credit:

There will be **three** extra credit opportunities. Each extra credit will count for 5 points. The extra credit will be in the form of a **"In-class Activities"**. Detailed instructions will be given in class. Extra credits will be available on class day and time. These extra credit assignments are completely optional and not mandatory. You will not be penalized for choosing to opt out of the extra credit. With that being said, if you miss that unannounced class day = you lose out on that particular extra credit assignment/activity opportunity.

Technology Requirements:

The use of Canvas is required in this course. Occasional syllabus updates, course materials, and course announcements will be communicated via Canvas. Go to <https://uta.instructure.com/> and login with your UTA email and password. If you are unfamiliar with how to work within this system contact the Help Desk in the Central Library. You can also email them for assistance: helpdesk@uta.edu.

Attendance and Drop Policy:

The modality of this class is **face-to-face only**. Attendance is not mandatory but is highly recommended for your success. If you are dropped from this class for non-payment of tuition, you may secure an Enrollment Loan through the Bursar's Office. You may not continue to attend class until your Enrollment Loan has been applied to outstanding tuition fees.

Dates to remember:

Census day, the last day to drop this course with an automatic "W". Otherwise, a grade of "F" will be assigned.

Course Specific Requirements:

This is an intensive course. Students are expected to know a lot of detailed information. Be sure to read the textbook before attending lectures and read the textbook after lectures. Reading lecture slides alone is not enough to make a good grade. When free tutoring is available, please take advantage to use it as much as possible.

Grading:

UTA policy will not allow the distribution of grades over phone call or email. There will be three exams. The final exam is **NOT comprehensive**. The format for exams will be multiple choice questions. You are **required to take all three exams**. If you miss an exam, a grade of zero will be given. The three exams will contribute equally to the calculation of the final grade.

Exam # 1	100 points
Exam # 2	100 points
Final Exam	100 points
Total	300 points

Calculating Your Grade, For Example:

$$85 + 75 + 90 = 250/300 = 83.3\% \text{ (B)}$$

The scores from three exams will be averaged and a letter grade will be assigned:

- A – 89.5% - 100%
- B – 79.5% - 89.4%
- C – 69.5% - 79.4%
- D – 59.5% - 69.4%
- F < 59.4%

Grade Grievances – For PSYC Students:

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog (see [Grading Policies](#); [Student Complaints](#)). Use the following link to submit a grade grievance to the department: <https://www.uta.edu/academics/schools-colleges/science/departments/psychology/degree-programs/graduate/graduate-resources/student-grievance-form>.

Grade Grievances / Conflict Resolution – For BIOL Students:

If you are experiencing an issue in class, you should first arrange a meeting with your instructor to discuss the issue. If you feel the issue requires further attention, you may then consult the lab or course coordinator (if applicable). If the issue is still not resolved, you may then submit your concern to the Associate Chair of the Department of Biology by filing a grievance at <https://common.forms.uta.edu/view.php?id=3403>. You must file the online form and have all supporting documentation to have your issue heard. Please note, none of the listed personnel will discuss the issue with you until you have first consulted all of those preceding him/ her.

Make-up Exam:

There are no make-up exam in this course unless documentation for a University-approved excuse (see Catalog <http://catalog.uta.edu/academicregulations/studentresponsibility/#attendancetext>) is received within one week of the exam date, except with conditions that will prevent you to access conscious means of communication. **All makeup exams will be offered during the last day of the course – 08/08/24 the day before the Final Exam.** Make-up test is **ONLY** for those students who miss the first two tests, for a valid reason. It is the student's responsibility to remember the day of the makeup test. **No test will be allowed to be taken earlier than the scheduled exam time and date.**

Course Schedule (Tentative):

Week		Chapter/Topic
1	T	Ch 1: Nerve Cell and Synapse
	W	Ch 2: Synapses
	TH	Ch 3: Anatomy and Research Methods
2	M	Ch 4: Genetics, Evolution, Development, and Plasticity
	T	Ch 5: Vision
	W	Ch 6: Other Sensory Systems
	TH	Ch 7: Movement & Review
3	M	Exam # 1 (Ch's 1 – 4) Monday July 22, 2024
	T	Ch 8: Wakefulness and Sleep
	W	Ch 9: Internal Regulation
	TH	Ch 10: Reproductive Behaviors & Review
4	M	Exam # 2 (Ch's 5 – 9) Monday August 5, 2024
	T	Ch 10: Reproductive Behaviors (Continued)
	W	Ch 11: Emotional Behaviors
	TH	Ch 12: Learning, Memory, and Intelligence & Review
5	M	Ch 12: Learning, Memory, and Intelligence (Continued)
	T	Ch 13: Cognitive Functions
	W	Ch 14: Psychological Disorders
	TH	Review / Make-up Day
	F	Final Exam (Ch's 10 – 14) – 08/09/24 1:00 pm – 3:00 pm

~ *As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Xavier G. Aranda, M.S.