# BIOL/PSYC3322-002: Brain and Behavior

Spring 2023

### **Instructor Information**

Instructor: Qing Lin, MD, PhD

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#### Office Hours:

An office hour is available every Tuesday between 9 -10 AM in ERB room 434. Students are welcome to bring questions and interact with the Instructor for Q&A regarding the course learning. Please note: If anyone requests a virtual meeting with me in "Microsoft Teams" or a meeting time rather than office hour, please make an appointment.

### **Course Information**

#### Time and Place of Class Meetings:

This is an <u>on-campus</u> ("face-to-face") class (For a full definition of the course modalities, please go to <u>www.uta.edu/academics/courses-and-schedules</u>). All lectures are held at **12:30 – 1:50 PM** every Tuesday and Thursday in the SH101.

#### **Description of Course Content:**

This course will provide a comprehensive review of physiological processes underlying the brain mechanisms that control animal and human behaviors. Topics will include anatomical structure, molecular basis, sensory and motor systems, neurotransmitters, hormones, control of hunger, thirst, temperature, emotional disorders, and schizophrenia, etc.

#### **Student Learning Outcomes:**

By the end of the course, students are expected: 1) to describe how the brain works to control and regulate human's behaviors and 2) to understand the associated brain mechanisms.

#### **Textbook and Other Course Materials**

**A.** <u>Biological Psychology</u>, edited by James W. Kalat, 13<sup>th</sup> edition (ISBN: 978-1-337-40820-2). This textbook is **required** for course learning and exams. The following are two recommended options:

i. Loose-leaf book of Biological Psychology (with 6-month MindTap Access).

**ii.** eBook of Biological Psychology + MindTap (with 180-day access and one-year access). If you need to know more options and information of the costs, please either visit UTA Bookstore at https://www.bkstr.com/texasatarlingtonstore/home or Cengage at https://www.cengage.com.

**Note:** you are responsible for taking your own risk to make a decision on purchasing older editions, since the answer keys to the multiple questions are based on the 13<sup>th</sup> edition.

**B.** The sets of PowerPoint slides provide the course outlines that help students to understand materials while interacting with the instructor in class and guide students to review for exams. The slides are uploaded at "Modules" in the Canvas available for students to download.

### Descriptions of major assignments and examinations:

There will be no assignments but reading the PowerPoint slides, textbook and using MindTap are highly recommended.

Please see **"Schedules of tentative lecture topics and exams"** on page 3 for lecture schedules and dates/times for exams. There will be *three* equally weighted closed-book exams and each exam covers 4-5 chapters. The 3<sup>rd</sup> exam will NOT be comprehensive. You are required to take all *three* exams. The format for exams will be multiple-choice. The form number of scantron answer sheet is 4521.

### **Technology Requirements:**

Since all information and course materials are provided via the Canvas, <u>it is strongly suggested</u> that students access the Canvas Help and/or tutorials to familiarize and download these tools prior to the class.

### **Other Requirements:**

The course prerequisites of this class are BIOL1441, BIOL1442 or PSYC1315.

## **Grading Information**

### Grading policies:

Each exam is worth **100** points with a total of **300** points for three exams. Additional **50** points are added for bonus questions to three exams (**15** points added to exams 1 and 2, and **20** points added to exam 3, respectively). The final percent grade will be determined by dividing the total number of earned points (including earned additional bonus points) by the total **300** points.

For examples, if you earn 250 points, your final percent score will be 250/**300**x100=83.3%; if you earn 310 points, your final percent score will be 310/**300**x100=103.3%. This is a way to calculate the final percent score yourself.

A final letter grade will be assigned where A  $\ge$  86%, B  $\ge$  76%, C  $\ge$  66%, D  $\ge$  56%, F  $\le$  55%.

**Note:** There will be **no** extra credit work to make up the grade. Please do not ask. UTA policy does not allow distribution of grade over the phone call or email.

### Make-up Exams:

If you miss an exam, a grade of zero will be given. There is no provision for taking a makeup exam in this course *unless* documentation for a University-approved excuse (see

<u>http://www.uta.edu/catalog/general/academicreg</u>) is received within five days of the exam date. **Note:** The instructor will schedule the dates/times for taking makeup tests and then informs the students involved.

## Expectations for Out-of-Class Study:

Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including intensively reviewing chapters guided by PowerPoint slides, doing quizzes, and/or quizzes provided in MindTap.

### Grade Grievances:

Any appeal of a grade in this course should submit a grievance form by following the procedures and deadlines as published in the current University Catalog (<u>https://www.uta.edu/academics/schools-colleges/science/departments/psychology/degree-programs/graduate/graduate-resources/student-grievance-form</u>).

### Schedules of Tentative Lecture Topics and Exams:

Students are required to know much detailed information. To this end, please be sure to read the textbook before and after attending lectures. Critically, students are strongly suggested to attend the lectures as many as possible in order to get the help in understanding of those difficult materials and the guides for exams.

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.

Week	Date	Lecture Topics	Reading
	(Every Tue & Thu)		Assignments
1	1/17, 19	Nerve cells and nerve impulses	Chapter 1
		Synapses	Chapter 2
2	1/24, 26	Synapses	Chapter 2
		Anatomy and Research Methods	Chapter 3
3	1/31, 2/2	Anatomy and Research Methods	Chapter 3
		Genetics, Evolution, Development and Plasticity	Chapter 4
4	2/7	Genetics, Evolution, Development and Plasticity	Chapter 4
	2/9	Vision	Chapter 5
5	2/14	Exam 1 (2/14, Tuesday, 12:30-1:50 PM, 80 min)	
		covers chapters 1,2,3 and 4.	
	2/16	Vision	Chapter 5
6	2/21, 23	The other sensory systems	Chapter 6
7	2/28, 3/2	Movement	Chapter 7
8	3/7, 9	Movement	Chapter 7
		Wakefulness and sleep	Chapter 8
9	3/13 - 17	Spring break	No lectures
10	3/21, 23	Internal regulation	Chapter 9
11	3/28	Exam 2 (3/28, Tuesday, 12:30-1:50 PM, 80 min)	
		covers chapters 5,6,7 and 8.	
	3/30	Internal regulation	Chapter 9
		Emotional behaviors	Chapter 11
12	4/4, 6	Emotional behaviors	Chapter 11
		Learning and memory	Chapter 12
13	4/11, 13	Learning and memory	Chapter 12
		Cognitive Functions	Chapter 13
14	4/18, 20	Cognitive Functions	Chapter 13
		Psychological disorders	Chapter 14
15	4/25	Psychological disorders	Chapter 14
	4/27	Backup or Review	
	4/28 – 5/3	Review	No lectures
		Makeup tests May 2 (Tue)	
	5/4-10	Exam 3 (May 4 (Thu), 8:00-10:30 AM, 2.5 h)	
	Final exam week	covers chapters 9,11,12,13 and 14.	
		Please also get <b>update</b> for dates of exams from	Exam 3
		https://www.uta.edu/administration/registrar/calend	
		ars/final-exams	

## Institution Information

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the <u>Institutional Information</u> page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

### **Additional Information**

#### **Face Covering Policy:**

Face coverings are not mandatory, all students and instructional staff are welcome to wear face coverings while they are on campus or in the classroom.

#### Attendance:

At the University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report must the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

Distance education courses require regular and substantive online interaction and participation. Students must participate in online course activities to demonstrate attendance; logging into an online class is not sufficient by itself to demonstrate attendance.

**Please note:** <u>Attendance is needed for success in this course</u>. As the instructor of this course, I will not necessarily track and record class attendance for lectures. However, due to much information included in the course, routinely attending the lecture will be extremely beneficial to students in grabbing and understanding the materials to improve the performance of course learning. If students miss a class meeting(s) or miss portions of classes due to tardiness or early departure, they are still accountable for the materials that are covered by those classes. If you miss a class, you are responsible for finding your classmates with whom you can share resources.

#### **Emergency Exit Procedures:**

Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

#### Academic Success Center:

The Academic Success Center (ASC) includes a variety of resources and services to help you maximize your learning and succeed as a student at the University of Texas at Arlington. ASC services include supplemental instruction, peer-led team learning, tutoring, mentoring and TRIO SSS. Academic Success Center services are provided at no additional cost to UTA students. For additional information visit: <u>Academic Success Center</u>. To request disability accommodations for tutoring, please complete this <u>form</u>.

The <u>IDEAS Center</u> (https://www.uta.edu/ideas/) (2<sup>nd</sup> Floor of Central Library) offers FREE <u>tutoring</u> and <u>mentoring</u> to all students with a focus on transfer students, sophomores, veterans and others

undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.

## The English Writing Center (411LIBR):

The Writing Center offers **FREE** tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at the <u>Writing Center</u> (https://uta.mywconline.com). Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see <u>Writing Center</u>: <u>OWL</u> for detailed information on all our programs and services.

The Library's 2<sup>nd</sup> floor <u>Academic Plaza</u> (http://library.uta.edu/academic-plaza) offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the <u>library's hours</u> of operation.

## Librarian to Contact:

Each academic unit has access to <u>Librarians by Academic Subject</u> that can assist students with research projects, tutorials on plagiarism and citation references as well as support with databases and course reserves.

# **Emergency Phone Numbers**

In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

# **Library Information**

## Research or General Library Help:

Ask for Help

- Academic Plaza Consultation Services (library.uta.edu/academic-plaza)
- <u>Ask Us</u> (ask.uta.edu/)
- Research Coaches (http://libguides.uta.edu/researchcoach)

Resources

- Library Tutorials (library.uta.edu/how-to)
- <u>Subject and Course Research Guides</u> (libguides.uta.edu)
- Librarians by Subject (library.uta.edu/subject-librarians)
- <u>A to Z List of Library Databases</u> (libguides.uta.edu/az.php)
- <u>Course Reserves</u> (https://uta.summon.serialssolutions.com/#!/course\_reserves)
- Study Room Reservations (openroom.uta.edu/)