Sensory System and Behavior

ZOO 4926 / ZOO 6927 2 credits

Prerequisites: For ZOO 4926 undergraduate section: a grade of "C" or better in Integrated Principles of Biology I and II (BSC2010 and BSC2011);
No prerequisites for ZOO 6927 graduate section.

Instructor: Hua Yan
Office: 511 Carr Hall
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Class Schedule: Tuesday, Period 7 (1:55 PM - 2:45 PM)
Thursday, Period 7 (1:55 PM - 2:45 PM)

Class Location: 211 Bartram Hall

Class format: Normally in person. In case of changes, will inform via email in advance.

Textbook: No textbook

Course website: https://elearning.ufl.edu/
(Select Log in to E-Learning) Class material, including the syllabus, slides, review and research articles, and other information related to the course, will be posted on the course website on e-Learning.

Office hours: Via Zoom, by appointment

Email: All email correspondence must be from your @ufl.edu account, have your full name in the body of the email, and contain the course number in the subject line. Emails not meeting these requirements may not be answered quickly.

Course Objectives: This course is for students to learn how molecular and cellular processes regulate sensory neural development and how neurons and neural circuits regulate behavior. Topics include but are not limited to: neurons, neural development, sensory modalities, and neural basis of behavior.
The course includes lectures and in-class group activities. Students not only learn concepts, but also read review and research papers and present these papers in class.
Grades are assigned based on attendance and performance on multiple assessments including: in-class activities (presentation of papers), summaries and exams.

In-class group activities Depending on the number of students, we will separate students into several groups. For each required reading, one group present the assigned paper and other groups write one-page summaries. See *Lecture Schedule* below.

Exams There will be 3 open-book exams during the semester. Exams are not cumulative. Exams will cover the material presented in lecture and assigned reading – so bring your notes

and assigned papers to the exam. The tests will contain multiple-choice questions and short answer questions.

Exam scores are released within a week after the exams, and are available for review for a week after its release. You may not review previous exams after the semester has ended.

Grading

Course grades will be determined by the scores of the 3 exams plus in-class activities as follows: Each exam will be 20% of the total course grade (3 exams = 60%). In-class activities will count as 40% of the course grade.

60% exam scores + 40% activity scores = 100% course grade.

See the table for conversion from point range to letter grade.

Point Range (%)	Letter Grade
≥ 93.0	A
≥ 90.0	A-
≥ 87.0	B+
≥ 83.0	B
≥ 80.0	B-
≥ 77.0	C+
≥ 73.0	C
≥ 70.0	C-
≥ 67.0	D+
≥ 63.0	D
≥ 60.0	D-
< 60.0	E

Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

Attendance and make-ups

Students are expected to attend all classes and learn all materials covered during lectures and in the assigned papers. Students need to read the assigned articles before coming to class.

Make-up exams will be given with prior permission or documentation of illness.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies.

Accommodations

Students who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Procedure for Conflict Resolution

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact the Undergraduate or Graduate Coordinator or the Department Chair. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (http://www.ombuds.ufl.edu; 392-1308) or the Dean of Students Office (http://www.dso.ufl.edu; 392-1261).

Conduct in Class

Please be courteous and **do not talk during lecture** (except during class discussions or activities)**,** as this can be distracting to the professor and the other students. Also, cell phones should be silenced during lecture.

Lecture Schedule Lecture topics for this course are listed below. This is a flexible, tentative schedule; the dates and amount of coverage of specific topics may vary somewhat from the list below.

Date		Topic
		Neurons and neural development
Thursday 8/22	1	Introduction to the course
Tuesday 8/27	2	Neurons and neural circuits 1
Thursday 8/29	3	Explain paper presentation
Tuesday 9/3	4	Neurons and neural circuits 2
Thursday 9/5	5	Neural development 1
Tuesday 9/10	6	Student presentation
Thursday 9/12	7	Neural development 2
Tuesday 9/17	8	Student presentation
Thursday 9/19	9	Exam 1
		Sensory systems
Tuesday 9/24	10	Visual system
Thursday 9/26	11	Student presentation
Tuesday 10/1	12	Chemosensory system
Thursday 10/3	13	Student presentation
Tuesday 10/8	14	Somatosensory system
Thursday 10/10	15	Student presentation
Tuesday 10/15	16	Auditory system
Thursday 10/17	17	Student presentation
Tuesday 10/22	18	Exam 2
		Neural basis of behavior
Thursday 10/24	19	Neural circuits and behavior
Tuesday 10/29	20	Student presentation
Thursday 10/31	21	Neuroplasticity and epigenetics 1
Tuesday 11/5	22	Student presentation
Thursday 11/7	23	Neuroplasticity and epigenetics 2
Tuesday 11/12	24	Social behavior
Thursday 11/14	25	Student presentation – neuroplasticity and epigenetics 2
Tuesday 11/19	26	Student presentation – social behavior
Thursday 11/21	27	Exam 3
Tuesday 11/26		Holiday — no classes
Thursday 11/28		
Tuesday 12/3	28	Summary of the course and discussion