



Syllabus

BIOL/CBIO 3800

Instructors

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Teaching Assistant

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Email correspondence: Please include “BIOL 3800” or “CBIO 3800” in the subject line along with the topic so that we can find class-related e-mails.

Two examples: *CBIO 3800 Question* or *BIOL 3800 Honors option*.

Meeting Times, Location & Important Dates

First day of class: Wednesday, January 13, 2021

Last day of class: Monday, May 3, 2021

Class days: Monday, Wednesday, Friday

Class time: 9:05 A.M.–9:55 A.M.

Location for class: on zoom

1st block - Lauderdale: to be announced on eLC

2nd block – Zeltner:

<https://zoom.us/j/97506441460?pwd=dnk4cGMyd2xCSXI5UG1CWjUvakh6UT09>

Meeting ID: 975 0644 1460

Passcode: 409704

3rd block - Lauderdale: to be announced on eLC

4th block - Zeltner:

<https://zoom.us/j/97532136147?pwd=NkcwSINUcnpnRUdiZkNNVEZDbIB3dz09>

Meeting ID: 975 3213 6147

Passcode: 393212

Exam Dates

Exam 1: Friday, February 12 from 9.05-9.55 A.M., online

Exam 2: Monday, March 8 from 9.05-9.55 A.M., online

Exam 3: Monday, April 12 from 9.05-9.55 A.M., online

Exam 4: Friday, May 7 from 9.05-9.55 A.M., online

Cumulative Quizzes: Due Friday, May 7, 11.59 P.M., online

General Information

Credit Hours: 4.0. Students who are successful in this course typically spend 8 to 12 hours outside of class per week studying the material covered in lectures

Prerequisites: Biology 1103 and 1104, or 1107 and 1108, or equivalent are prerequisites for this course. It is assumed that you have fulfilled these requirements.

Online teaching: Due to the size of this class, all instruction will be given online in an synchronous manner (live lectures on zoom) and quizzes and exams will also occur online. We aim to record each lecture and post the recordings on eLC for your convenience. However, we strongly encourage attendance in each class. Furthermore, we encourage that students keep their video on, this will help the instructors to get to know students better in an already difficult online setting and thus will improve your and our experience.

Mental Health and Wellness Resources: If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services. UGA has several resources for a student seeking mental health services (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support (<https://www.uhs.uga.edu/info/emergencies>). If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center. Additional resources can be accessed through the UGA App.

Course Materials

Textbook

Neuroscience, edition 6. Purves, Augustine, Fitzpatrick, Hall, LaMantia, McNamara & LE White (eds.) Publisher: Sinauer Associates, Inc.; ISBN: 978-1605353807.

Note: the 5th edition is also acceptable, but there are differences in content.

eLC page

CBIO3800 Neurobiology Spring 2021 (<https://uga.view.usg.edu/d21/home/2234848>) Lectures and supplemental information will be posted to eLC.

Course description

This course serves as an introduction to the structural organization, basic physiology, and neurochemistry of the vertebrate nervous system. The basic progression of the course is from the level of the individual units of the nervous system - nerve cells - up to their integration into the nervous system as a whole.

Course goals

The major goal of this course is to offer you the essentials required to continue your training in the neurosciences, and for you to use these skills to understand and critically examine the primary literature in this new and fascinating field.

Assessment

Grading

Grades will be assigned on a scale of A-F using the plus/minus grading system. *Grades will be determined from cumulative point totals for exams and online quizzes.* A total of 100 points are possible for this class: 80 points from exams and 20 points from quizzes.

An additional 10 bonus points (10% of final grade) are available that count as extra credit; these points will come from 2 extra quizzes available replace your two worst quizzes.

Grade assignments:	A	93.0-100%
	A-	90.0-92.9
	B+	87.0-89.9
	B	83.0-86.9
	B-	80.0-82.9
	C+	77.0-79.9
	C	70.0-76.9
	D	60.0-69.9
	F	59.9 and below

Block 1- Lauderdale:

1/5 th Exam 1	12 lectures	24 pts (~2pts/lecture)	2 quizzes
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Block 2- Zeltner:

1/5 th Exam 2	8 lectures	16 pts (~2pts/lecture)	2 quizzes
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Block 1- Lauderdale:

1/5 th Exam 3	13 lectures	24 pts (~2pts/lecture)	2 quizzes + 1
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Block 1- Zeltner:1/5th Exam 4

9 lectures

24 pts (~2pts/lecture)

2 quizzes + 1

Overall:1/5th quizzes

8 quizzes (2/block)

20 pts (~2.5pts/quizzes)

100 pts

(possible to get 10 extra points with 2 extra quizzes)

Examinations

There will be four exams, one after each block. All 4 exams will be 50 min long and given online. Exams account for 80% of the grade, quizzes account for 20% of the grade. The dates of the exams are listed on the first page of the syllabus. Please mark your calendars appropriately.

If for any reason you are unable to take a test at the scheduled time, arrangements must be made in advance and IN WRITING. In case of an unexpected illness, you will be expected to notify us by email before the test and to present a note from a physician or the health center.

Extra Credit: Up to an additional 10 bonus points are available that count as extra credit.

To be considered for extra credit, you must have completed the 2 extra quizzes online before the deadline Friday, May 7, 11.59 P.M.

Honors Option

In accordance with the requirements of the Honors Program at The University of Georgia, students who wish to earn Honors credit for BIOL/CBIO 3800, Neurobiology, are expected to complete additional academic work, as well as the normal course requirements for this class. To receive Honors credit in this class, students will be asked to prepare a research proposal that focuses on a current topic in neurobiology. This topic can be picked from a list of topics provided by the instructors, or students may suggest topics if they have specific interests, but instructor approval is required.

Students will research their chosen topic, develop a hypothesis that addresses one aspect of this topic, and then propose at least two experiments designed to test their hypothesis. The proposal will have the following parts: (1) an Abstract briefly stating the problem, what is known about the problem, the hypothesis that is being tested, and the specific aims of the research proposal (what experiments are you going to use to test your hypothesis and what do you hope to accomplish with your experiments?); (2) an Introduction that will address the background leading to the development of the hypothesis and the significance of the problem; (3) the Research Design and Methods (what experiments are you going to use to test your hypothesis and why); and (4) a discussion about all possible outcomes from the experiments: the student is expected to predict both the results that would be consistent, or inconsistent with the hypothesis, or other novel findings and their implications.

The proposal should be approximately 7 to 10 pages in length (not including citations), single spaced, with one-inch margins, and use a font size of 12 points. You may want to include figures or drawings to help clarify your presentation. Additional information and guidelines pertaining to the format of the proposal will be made available to you by your instructors. A draft of the abstract is due no later than March 1st, and the final research proposal is due no later than the last day of class.

Sections in Research Proposal

Abstract/ Specific Aims (1 page or less)

A brief statement of the problem, what is known about the problem that lead to the development of the hypothesis to be tested, and a brief statement of how you are going to test the hypothesis. The hypothesis must be clearly indicated. The specific aims should be statements of what you want to test.

Introduction (~2-3 pages)

State the hypothesis to be tested at the top of the page

Background and significance (What is known about this problem; why is it important? Be sure to discuss previous experiments that lead to the development of your hypothesis!)

Specific Aims of the proposal (What do you hope to test in more detail) and Experimental Design (~4-6 pages)

Describe what the experiment is designed to test.

Give a brief description of the methods to be used. Use only accepted protocols; give citations. Include the appropriate controls that would help you interpret your experiments! Describe outcome(s) that would support your hypothesis and state why. Describe outcomes that would not support your hypothesis and state why.

Literature Cited (~ 1-3 pages) Complete citations.

Email correspondence:

Please direct all emails pertaining to BIOL/CBIO 3800 Honors to the TA, Ms. Carly Duffy (carly.duffy25@uga.edu). Include "BIOL 3800" or "CBIO 3800" in the subject line along with the topic so that we can find class-related emails. (Two examples: "CBIO 3800 Question" or "BIOL 3800")

Honors Option Major Assignment Dates:

All Assignments due by 5pm of posted date or before.

- 1) Meeting arranged with TA for paper topic approval (10 pts): By Monday, February 1st, by appointment
- 2) Specific Aims (10 pts): Monday, February 15th
- 3) Introduction (15 pts): Monday, March 1st
- 4) Detailed Specific Aims/Experimental Design (15 pts): Monday, March 15th
- 5) Rough Draft of full proposal (40 pts): Monday, March 29th
- 6) Second Scheduled meeting for TA feedback of proposal rough draft (10 pts): By Monday, April 12th
- 7) Final Paper Due (100 pts): Monday, April 26th at 5:00pm

To receive the Honors, you must achieve a grade of "B" or higher.

