

Instructor:

Prof. Brian T. Cunningham
Micro and Nanotechnology Lab, Room 3260
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Teaching Assistant:

Weijing Wang: weijing4@illinois.edu

Class Meeting Time and Place

- 9AM (CST), MWF, Meeting “live” online by Zoom, with the class session recorded.
- Zoom link for all classes:
 - <https://illinois.zoom.us/j/84542487082?pwd=dC91YVINK1VVTjkxeG9qZGVyNGVnQk91T09>
 - Meeting ID: 845 4248 7082
 - Password: 789641
- To get better acquainted with the class, I will “arrive” 15 minutes early and stay after class to chat informally with students about life, the universe, and biosensors. The lectures will be recorded with links posted on Compass, but I will not record the informal discussions.
- A link to the Zoom recording will be posted in Compass with the lecture materials, after conclusion of the class session.
- During class, please observe good Zoom etiquette:
 - Please leave your camera on so I can see you! It’s too sad for me to lecture to a bunch of blank boxes with names in them. I’d like to get to know you despite lecturing online. Maybe I’ll try calling on you, like in a live class!
 - Please leave your microphone on mute unless you speak up to ask a question or to give an answer.
 - If you are going to eat your breakfast, brush your teeth... maybe temporarily shut your camera for that stuff. But mostly please have your camera on.
 - I’ll keep an eye on the Zoom chat box while I lecture. Please use the “hand raise” function and drop a question into the chat to get my attention.

Instructor Office Hours:

Prof. Cunningham: Before class, after class and by appointment

TA Office Hours: On weeks that HW is due:

Wednesdays, Thursday = (Weijing – please suggest some TA office hours for the weeks that HW assignments are due. Dues dates will always be on a Friday)

Web Page:

We will use the ECE/BioE416 Compass2g site for posting all course documents, HW assignments, lecture slides, reading assignments, HW solutions, links to lecture recordings, and grades.

Texts:

There is no textbook for the course. Reading assignments for each class session are posted on the Compass2g web site. I will expect that students to have read the reading assignments before the assigned class session, and to be ready to participate in a discussion about the

assigned material. It is “fair game” for quiz questions to derive from material in the reading assignment that was not extensively described in lecture.

Exams:

The course does not have a midterm or a final exam. Instead, there will be a Compass quiz every week, covering the material in lecture from the preceding week. The quizzes are intended to encourage participation in lectures, and should not be difficult if you paid attention to the lecture. Quiz questions may also be derived from the reading assignments. *Quizzes will be released on Fridays at 12 Noon, and must be completed by Sundays at 10PM.* You will get two attempts per quiz, retaining the higher of the two scores.

Homework:

5 homework sets will be assigned throughout the semester. Problems are due during the class period, as shown on the course schedule. Homework assignments will be distributed at least 1 week before they are due, and will generally be due on Fridays. Solutions will be posted on Compass. Late homework will be accepted, but 10% will be deducted for each day it is late. Under exceptional circumstances, the student should see the instructor.

Some of the homework questions are traditional problems that require some analysis, calculations, (sometimes) outside research, and written answers about a particular scientific journal article. Since the quizzes are intended to be easy, the homework assignments will require some thinking, learning, and effort. My best advice is to start early!

We will set up an Illinois Box folder for you to securely turn in your homework in pdf format. Instructions will be provided.

Term Paper:

A separate document will describe and give detailed instructions for the Term Paper assignment. **Each student will develop an NSF-style research proposal for a topic that they choose.** A list of potential topics will be provided by the instructor at the beginning of the semester. If a student wishes to choose a topic that is not listed, please see the instructor for permission. *However, students are not allowed to choose a topic that is already the subject of their graduate thesis research or undergraduate research project.* It is possible that more than one student will develop a Term Paper for the same topic, but the students are expected to work independently, and their paper will represent their own individual effort.

Specific sections of the Term Paper will be due incrementally throughout the semester, as indicated on the course schedule. Term Paper sections will be due in weeks for which there is no HW assignment. The instructor will provide feedback on each section and possibly ask for changes to be made, that must be included with the next due date. **The complete Term Paper will be due on the final day of class (May 5). Using a 100-point basis for the value of the term paper, each of the five increments during the semester is worth 10 points each, with zero credit given if the section is turned in late. The final, complete term paper is worth 50/100 points.**

Grading Policy:

Homework assignments (5):	40%
Quizzes (14):	30%
Term Paper:	30%

Due to the extra-ordinary stresses on students during the COVID pandemic, the University is encouraging instructors to offer extra flexibility. This semester we will throw away the HW assignment with the lowest score, and the two lowest quiz scores.

If you need extra time with an assignment, please check with the instructor or the TA in advance to obtain permission. Assignments must be turned in before the solutions are released.

Grade Disputes:

Grade disputes on homework and quizzes will be settled at the discretion of Prof. Cunningham. In both cases, the problem in question will be RE-GRADED, making it possible for you to receive a lower score. To dispute an exam grade, you must explain your dispute IN WRITING and staple this to the front of your exam or homework. Prof. Cunningham will re-grade your exam and the TA will regrade HW.