

BIO 2289 Fall 2014

Introduction to Undergraduate Research. This seminar series is designed to give you a broad exposure to opportunities for undergraduate research and to practice the skills needed to secure a research position.

Instructor

Dr. John Cooley

Contact information:

- Office: TLS 81
- Phone: [REDACTED]
- Email: [REDACTED]
- Office Hours: Thursdays 1:30-3:30 PM
- Or by appointment at: [REDACTED]
- Website: HuskyCT



Meetings:

- Wednesdays 2:30-3:20 pm
- E2-322

Grading

<i>Item</i>	<i>Points Each</i>	<i>Due Date</i>	<i>Number</i>
One Paragraph Summaries	10	Weekly	No more than 10
Research Wiki Entries	10	Weekly	No more than 5
Written Questions	10	Weekly	No more than 10
Curriculum Vitae	20	11/19/2014	One only
Grant Application	50	11/19/2014	One only
<i>You must submit 15 assignments; you choose the mix</i>			
<i>Total must add to no more than 150 points possible</i>			
<i>No extra assignments will be accepted or graded</i>			

Course basics

- Weekly presentations by members of the UCONN community about on-campus research projects.
- Engaging with research speakers
- Identification of off-campus summer research opportunities and creation of a class Wiki.
- Construction of a CV for inclusion in grant or job applications
- Construction of a grant application for Sigma Xi, a scientific research society that funds undergraduate research.

Assignments and Grading

Attendance at weekly presentations. These sessions will be more fun and informative if you take advantage of the opportunity to ask questions!

Your grade will be determined on the basis of 15 assignments that you submit over the course of the semester, all via HuskyCT. No more than 15 will be accepted (and note that some options count for double or even quintuple). The assignments have been designed to give you flexibility in which assignments you choose to complete so that you can follow your own interests and manage your own schedule. Each week will have a separate SafeAssign folder for you to submit your written work; for the Wiki entries, you should just add them directly to the Wiki. Don't worry—you'll probably have some weeks when you might not submit anything through SafeAssign. All that matters is that you need to do a total of 15 of these assignments.

One Paragraph Summary

Write a short, **One Paragraph Summary** of a weekly presentation that encapsulates the main point of the talk. You should cite one article of primary scientific literature, using APA format (<https://owl.english.purdue.edu/owl/resource/560/01/>). In most cases, finding this literature will be easy—the speaker may have published his or her work, or somebody in the same lab will have. If not, ask for help. The objective of this assignment is to help you learn to take concise and informative notes. Be sure to include the following: speaker's name and affiliation, broader interests in his/her field of research, the main focus for the particular project(s) discussed, and study system. Some evaluation of what aspects you found most interesting or questions the research made you think about is also appropriate.

Ground Rules

- Grammar and spelling count!
- Submit your responses via SafeAssign before the next class meeting to receive credit
- You must have attended the presentation that you are writing about
- You cannot write a **One-paragraph summary** for the same presentation for which you are submitting a **Written Question**.
- You may submit a maximum of 10 **One Paragraph Summaries**.
- This option is worth 10 points.

Research Wiki Entries

There are virtually limitless summer research opportunities aimed at undergraduates. These are offered in many settings (from companies, to universities, to field stations) and may even pay you to travel somewhere exciting. You can receive class credit for helping build a class Wiki. The purpose is twofold—many scientists communicate information via Wikis, so it's good to learn how to use them, and this particular Wiki will be a resource for all students looking for summer opportunities.

Ground Rules

- Make your entries directly in the class Wiki on HuskyCT
- Research opportunities must be off-campus
- Research opportunities must be available to undergraduates in Summer 2015
- Your entries must be unique—getting started early gives you an advantage!
- You may submit a maximum of 5 **Research Wiki Entries**.
- This option is worth 10 points.

Your entry must follow the format below and the web links must work:

1. What/where is the experience?
2. Provide a link to a web page for the program/opportunity
3. What are the qualifications? What would you have to do to be eligible next summer?
4. Is the position paid?
5. What's the application process?
6. What's the deadline?
7. Your name and date.

See the example—Harvard REU programs—on the class Wiki.

Written Questions

Write a short question following a weekly presentation. You should try to cite one article of primary scientific literature, using APA format (<https://owl.english.purdue.edu/owl/resource/560/01/>). In most cases, finding this literature will be easy—the speaker may have published his or her work, or somebody in the same lab will have. If not, ask for help. Then, submit the question to the presenter. When you get a response, include your question, the presenter's response, and your analysis of the response in one document. If you need help communicating with a presenter, don't hesitate to ask!

One excellent way to “test drive” your question is to ask it in person at the end of the presentation—then you can refine it, write it down, and submit it as a written question.

Ground Rules

- Grammar and spelling count!
- Submit your responses via SafeAssign no later than one week after the presentation
- You must have attended the presentation that you are asking a question about
- You cannot submit a **Written Question** for the same presentation for which you are writing a **One-paragraph summary**.
- You may submit a maximum of 10 **Written Questions**.
- This option is worth 10 points.

Curriculum vitae

In academics, it's customary to submit a **Curriculum vitae** (CV) when applying for positions. This document should provide the target audience (such as a potential

research mentor) with relevant information in a well-organized and easy-to-read format. The Writing Center can give you help in writing a good CV.

Ground Rules

- Submit your CV via SafeAssign no later than 19 November 2014
- You may submit a maximum of 1 **Curriculum vitae**.
- This option counts **double**—that is, it’s worth 20 points and can substitute for **two** of the 10 point assignments.

Grant Application

Sigma Xi (<http://www.sigmaxi.org>) is a scientific research society designed to foster scientific education and research, especially for undergraduates. Getting a grant from Sigma Xi is a prestigious honor that can give you a head start on your career. What do you have to do to get a grant? You have to apply! This assignment is designed to take the mystery and guesswork out of application—over the course of the semester, you will construct an application for an undergraduate research grant from Sigma Xi (or some other suitable granting agency that we agree on). I will grade and comment on the application as if I were a reviewer.

Ground Rules

- Grammar and spelling count!
- You **aren’t** required to submit your application to the granting agency, though you may if you want to.
- You **are** required to schedule **five** meetings with me over the course of the semester to work **one-on-one** on this assignment.
- Submit your application via SafeAssign no later than 19 November 2014
- You may submit a maximum of 1 **Grant Application**.
- This option counts **quintuple**—that is, it’s worth 50 points and can substitute for **five** of the 10 point assignments.

Meeting Schedule

Date	Name	Department
8/27/14	John Cooley	EEB
9/3/14	Eric Schultz	EEB
9/10/14	John Lees-Shepard	MCB
9/17/14	Karolina Fucikova	EEB
9/24/14	Chris Simon	EEB
10/1/14	Nora Mitchell	EEB
10/8/14	Barbara Mellone	MCB
10/15/14	Dan Schwartz	PNB
10/22/14	Brigette Zacharczenko	EEB
10/29/14	Katiria Flores	PNB
11/5/14	Simona Augyte	EEB
11/12/14	Seila Omer	MCB
11/19/14	Elizabeth Jockusch	EEB
12/3/14	Collections	EEB

Getting help

Stuck? Need help? Ask!

Email is the best way to contact me, but you must put "BIO 2289" in the subject line to ensure that your message does not get filtered as SPAM. Your success in this course depends on your motivation to make due dates and schedule meetings with me. Students who are more highly motivated tend to do better.

The Writing Center has a section of its web site devoted specifically to advice on writing in biology (http://www.writingcenter.uconn.edu/s_biology.php) with a lot of superb information. Review this site during the first two weeks of the semester as it will serve you well for the assignments. Pay particular attention to the "Practical Guide to Reading the Primary Literature in Biology" (http://www.writingcenter.uconn.edu/pdf/Practical_Guide_to_Reading_the_Primary_Literature_in_Biology.pdf).

Students With Disabilities: Students who need accommodations should contact the Center for Students with Disabilities as soon as possible to verify their eligibility for reasonable accommodations. For more information, please go to <http://www.csd.uconn.edu/>.

Additional Expectations

If you are unable to attend class for any reason, please alert me as soon as possible, but certainly before class. The sooner you tell me, the easier it will be to arrange a make-up assignment. You are responsible for all assignments even if you miss class, regardless of the reason.

I cannot give "extra-credit" under any circumstances. To do so would be unfair to other students who were not given the same opportunity to gain such credit.

Academic misconduct will result in lowered grades, failure of the course, or other disciplinary actions. You must cite any references used in your written assignments and the papers you submit must be your own original work. Please see the University policy on this topic at: http://www.community.uconn.edu/academic_misconduct_faq.html. If you turn in a paper that you did not write, that is not based on your ideas, or that does not appropriately cite other peoples' work, you will almost certainly fail the course.