

Graduate Seminar Syllabus BIOL 5105

Graduate Seminar Instructor: Chris Mares, Ph.D.

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Course Description

BIOL 5105 Graduate Seminar Credit: 1 (1-0-0)

This course provides graduate students with an opportunity to explore current primary research across a variety of biological disciplines. This seminar will use a variety of modalities including journal club style review of literature, invited talks by leading biologists and proposal presentations by the students to evaluate current topics in biology.

Course Objectives

This particular iteration of the graduate seminar will emphasize scholarly engagement through two formats:

1. Journal Club: Students will select and present peer-reviewed research articles for group discussion.
2. Invited Speaker Sessions: In pairs, students will identify and invite a scholar or professional in the field to present to the class (via Zoom or in person). The seminar will provide opportunities to critically evaluate research, improve presentation and discussion skills, and engage with external scholars.

Course Requirements

1. Invited Speaker Project

- a. By Week 2, student pairs must propose a scholar to invite.
- b. Students will work together to extend the invitation and coordinate logistics.
- c. Each pair will introduce their invited guest and moderate Q&A.

2. Journal Club Presentations

- a. Each student will select at least one research article (with instructor approval).
- b. The student will provide the article to peers one week in advance.
- c. The student will present and lead discussion during the scheduled week.

3. Participation

- a. All students are expected to read assigned articles prior to class.
- b. Active and thoughtful contributions to discussion are required.

Course Schedule (Tentative)

Week 1 – Introduction & Course Overview

- Discussion of seminar format, expectations, and logistics.
- Pairing students for invited speaker project.

Week 2 – Proposal of Invited Speakers

- Each pair submits their choice for approval.
- Begin outreach to invitees.

Weeks 3–14 – Alternating Journal Club & Invited Speaker Sessions

- Weeks with Invited Speakers: Guest presentation + discussion moderated by student hosts.
- Weeks without guest speakers: Journal article presentation and discussion led by assigned student(s).

Week 15 – Wrap-Up & Reflection

- Student reflections on invited speaker experiences and key takeaways from the seminar.
- Discussion of possible continuation into Spring semester.

Grading & Evaluation

This seminar will be graded on a Letter Grade basis. Evaluation will be based on:

- Invited Speaker Project (30%) – Successful identification, invitation, and hosting of speaker.
- Journal Club Presentation (30%) – Quality of article selection, presentation, and discussion facilitation.
- Participation (40%) – Consistent preparation, contributions to discussion, and engagement in guest sessions.

Notes

- Articles must be circulated to all students one week in advance of the scheduled discussion.
- Invited speakers should be confirmed as early as possible to ensure scheduling.
- The seminar will continue into Spring for students enrolled in both semesters.

Detailed Schedule (Fillable) – Note that this is not set in stone and that speakers may want to visit earlier.

Week	Date	Format Presenter / Leader
1	[8/27]	Introduction & Overview-Instructor
2	[9/3]	Invited Speaker Proposal All Students (in pairs)
3	[9/10]	[Journal Club] [Student, Student, Student]
4	[9/17]	[Journal Club] [Student, Student, Student]
5	[9/24]	[Journal Club] [Student, Student, Student]
6	[10/1]	[Invited Speaker] [Guest]
7	[10/8]	[Journal Club] [Student, Student]
8	[10/15]	[Invited Speaker] [Guest]
9	[10/22]	[Journal Club] [Student, Student]
10	[10/29]	[Invited Speaker] [Guest]
11	[11/5]	[Journal Club] [Student, Student]
12	[11/12]	[Invited Speaker] [Guest]
13	[11/19]	[Invited Speaker] [Guest]**
14	[11/26]	Thanksgiving Break
15	[12/3]	[Invited Speaker] [Guest]