

Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring

Course Prefix: BIOL

Course Title: Student Seminar

Year: 2025

Course and Section #: 4940-X04

Credits: 2

Course Description

Requires students to research and evaluate scientific literature, give oral presentations, prepare written summaries of primary literature, and lead discussions on assigned biology topics in specific areas of current research in biology or subdisciplines.

This course will help to meet degree requirements for the following programs:

- Biology, B.S.
 - Biology Education, B.S.
 - Botany, B.S.
 - Bioinformatics, B.S.
 - Biomedical Science, B.S.
 - Microbiology, B.S.
 - Zoology, B.S.
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Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Harini Krishnan

Student Learning Outcomes

Upon successful completion of this course, the student will be able to:

1. Access current resources (e.g., peer reviewed journals) of biological research information.
2. Critically analyze the findings presented in scientific journals.
3. Discuss shortcomings in research articles.
4. Describe current techniques in biological research and their area of application.
5. Present an appropriate oral summary of a scientific journal article.

Course Materials and Texts

No textbooks are required for this course. You will be expected to research scientific articles and read those.

Technology Expectations

- Students will need reliable internet access throughout the semester.
- Computers with access to the internet and e-mail, as well as printers, are available to UVU students on all campuses. More information can be found on the [UVU Open Computer Labs website](#).

Course Requirements

Course Assignments, Assessments, and Grading Policy

PAPER SUMMARIES: You will summarize primary literature research papers on a biological topic of your or your peers' choice written for a lay audience. Your summary will include sufficient background information to introduce the topic, discuss the methods used, review the data and include major conclusions. In addition, you should discuss any pitfalls of the study or biases. **Your total grade for the paper summaries will be determined by the following assignments:**

- **Draft of Article Summary (PEER-REVIEWED)**
- **Revised Article Summary**
- **Paper Summaries 1-6 (The week you present, you do not need to summarize your article, just your classmates articles)**
- **1 Paper Summary Revision**

RESEARCH TOPIC ORAL PRESENTATION: For this assignment, you will present your primary literature research paper on a biological topic of your choice. You will present your research paper to the class including sufficient background information to introduce the topic. You should also discuss the methods used, a review of the data presented with figures, a discussion of the author's interpretation of the results and your own critique and analysis of the study. **Organize your talk to be between 15-20 minutes. Record your presentation in MS Teams or Kaltura and post it to the discussion board associated with the week you are presenting it. Posting a link to your video is not sufficient and will result in 0 points. Failure to submit your selected journal article for the other students in the class will also result in a grade of 0 for this assignment as that is needed for the rest of the class to complete their assignments. Be prepared to answer questions as you will be responsible for moderating the discussion board for your presentation that week.** Your grade will take into account content and delivery of your presentation (please see rubrics for grading). Further instructions are also posted in the student presentation discussion boards. **Your total grade for the oral presentation will be determined by the following assignments:**

- **Rough Draft of Oral Presentation PPT Submission (PEER-REVIEWED)**
- **Oral Presentation Final Submission**

DISCUSSIONS: There will be several topics that we will discuss during this course. Posts to the discussion should add significantly to the conversation and support your point of view. *Comments that do not add significantly to a discussion will receive no credit.* It is okay to disagree in a discussion. In fact, much learning happens when we disagree. However, we need to be respectful and keep our online classroom a safe place to learn. **Your total grade for the discussions will be determined by the following assignments:**

- **General Discussions:**

- **AI Generators**
- **Common Pitfalls in Scientific Summaries**
- **How to fix common presentation issues**
- **Student Presentation Discussion Board**
 - **Presentation posting & moderation of questions**
 - **Asking Questions if not Presenting**

PEER-REVIEWS: Peer-reviews help you to develop your ability to critically evaluate a piece of written work. These assignments will not only help you improve your own writing skills, but also enable you to provide constructive feedback to your peers. **Your total grade for the peer-reviews will be determined by the following assignments:**

- **Peer-review of Article Summary**
- **Peer-review of PPT Presentation Draft**

OTHER ASSIGNMENTS: You will have a variety of small assignments throughout the course. These assignments help you better understand course material or to be prepared for your classmates' presentations. **Your total grade for the other assignments will be determined by the following assignments:**

- **Syllabus Quiz**
- **Library Search Exercise**
- **Primary Scientific Article Submission**
- **Analyzing Scientific Literature Assignment**
- **Reflection**
- **Oral Presentation Sign-up**

Discussions will be opportunities to explore topics together. Posts to the discussion should add significantly to the conversation and support your point of view. Comments that do not add significantly to a discussion will receive no credit. It is okay to disagree in a discussion. In fact much learning happens when we disagree. However, we need to be respectful and keep our online classroom a safe place to learn.

Grading Scale:

Grading: the following are grade letters earned based on cutoffs by percentage

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Percent	94-100	90-93	86-89	83-85	80-82	76-79	73-75	70-72	66-69	63-65	60-62	0-59

Assignment Categories

Assignment Category	Percent of Overall Grade
Paper Summaries	50%
Oral Presentation	30%
Discussions	5%
Peer Reviews	10%
Other Assignments	5%

Assignment Category	Percent of Overall Grade
Total	100

Late Work Statement:

Discussion posts, peer-reviews, and your oral presentation are not accepted past the deadlines and will result in a grade of zero.

Any other work can be submitted LATE on Canvas (up to ten days late) with a 5% deduction per day late. Any missed assignments turned in after 10 days will result in a grade of zero.

Required or Recommended Reading Assignments

N/A

General Description of the Subject Matter of Each Lecture or Discussion

Week	Date	Assignments	Due	Other Dates
1	Jan 6-10	Syllabus & Introduction Where to find sources of information	Syllabus Quiz	
2	Jan 13-17	Anatomy of a paper How to analyze figures	Library Search Exercise Oral Presentation Sign-up Primary Scientific Article	
3	Jan 20-24	How to Write a Scientific Research Paper Summary	Analyzing Scientific Literature Assignment Discussion: Common Pitfalls in Scientific Summaries	Mon, Jan 20th: Martin Luther King Jr. Day
4	Jan 27-31	AI Generators How to conduct Peer-Reviews	Discussion: AI Generators Draft of Article Summary	Mon Jan 27: Last Day to Drop & not show on transcript
5	Feb 3-7	Components of a Scientific Presentation	Peer-Review of Article Summaries	
6	Feb 10-14	How to conduct a peer-review (refresher)	Draft of Presentation (PPT only)	

Week	Date	Assignments	Due	Other Dates
7	Feb 17-21	Giving a Scientific Presentation Peer-reviews	Peer-Review of Presentation Draft Discussion: How to address common issues in scientific presentations	Mon Feb 17: President's Day
8	Feb 24-28	Classmate Article Summaries How to Record and Post Your Presentation	Revised Article Summary	
9	March 3-7	Student Presentations 1 & 2	Final PPT Presentation (file only) Paper Summary 1	
-	March 10-14	Spring Break		March 10-14 Spring Break
10	March 17-21	Student Presentations 3 & 4	Paper Summary 2	March 17: Last day to withdraw
11	March 24-28	Student Presentations 5 & 6	Paper Summary 3	
12	March 31-April 4	Student Presentations 7 & 8	Paper Summary 4	
13	April 7-11	Student Presentations 9 & 10	Paper Summary 5	
14	April 14-18	Student Presentations 11 & 12	Paper Summary 6	
15	April 21-22		Final Revision - Paper summary of your choice SRIs	April 22: Classes End

Week	Date	Assignments	Due	Other Dates
Final Exam Week	April 24-30	Synthesis Day	Reflection	April 24-30: Final Exams

***Topics or assignments may change as needed. Announcements regarding such changes will be made during regular class hours. Students who are absent or tardy when such announcements are made will still be held accountable for the changes.**

Required Course Syllabus Statements

Generative AI

AI is a tool with potential usefulness for writers. However, AI is also fraught with serious issues. It possesses accuracy problems while simultaneously sounding very confident about its incorrectness. It also frequently generates fake citations and quotations. It cannot understand the complexities and contexts of human communication. Finally, the way AI is trained on other texts poses several ethical questions about copyright and intellectual theft of property (along with uncritically inheriting the biases of the texts it's trained on).

To be clear, copying the exact wording of an AI chatbot is considered plagiarism and means that a student will be held accountable for violating academic integrity. Although many citation guides are already presenting ways to properly use and cite AI, citing AI in your work is not in line with the standards of scientific writing.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.