



PLS 4950 Plant Science Capstone

Syllabus, Fall 2025

Schedule

100% Online, Asynchronous

3 Credits

Course Instructor

Dr. Dina Liebowitz, Plant Science Program Director

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Office location: 1137 Fifield Hall

Office hours: By appointment

Course Prerequisites: PLS3004C and PLS4941

WELCOME! We're glad you're here!

Course Overview and Purpose

The goal of this course is to apply what you've learned in the plant sciences to create a project that will help you continue to dig into your career passions, and showcase your skills to potential employers or graduate school programs. Capstone projects can connect to many realms, from industry to research, service, and extension; you're encouraged to use what you learned in Capstone Planning class about the different types of Capstone projects, and to reach out to your network and connect with a partner who can help you make this project as applicable as possible to real world issues!

The course is 100% online and asynchronous, with individually scheduled discussions with the instructor, and online communications and feedback with peers.

The course builds up to three main final assignments:

1. The Capstone Project, which can be any number of formats: conduct and report on an experiment, create a curriculum, write an extension publication, set up a research proposal, develop a methodology, hone a production protocol, build a resource, etc.
2. The Poster, which is a visual, conference-style method for sharing your information from the Capstone Project.
3. The Flash Talk, which is a 2-3 minute oral presentation, aimed at connecting an audience to your project.

Student Learning Objectives

At the successful completion of this course, you will have demonstrated your mastery of the skills and learning objectives listed below:

1. Assess current issues in the plant sciences that can be addressed through research or creative project design, using scientific literature and industry resources.
2. Design a research project or creative approach to solving a problem, including a timeline and implementation plan for the project.
3. Implement a research plan or project plan, demonstrating careful data collection and/or critical thinking to solve a problem.
4. Analyze data or project resources to address the plant science question or design an answer to the industry problem.
5. Demonstrate effective science communication skills via a variety of formats, including technical report writing, visual story-telling through a conference-style poster, and verbal communication through a flash-talk.

Course Catalog Description

Identify a problem or topic in plant sciences and develop a poster presentation about this problem or topic. This course discusses the following topics: how to develop a hypothesis, how to complete a reliable literature review, the importance of peer review and how to present results and findings.

Course format and participation

The course content is designed to support you as you develop your project and includes readings, videos, and other material relevant to the development and completion of the capstone project.

Checkpoints will be set up through the semester to discuss your project and share feedback. If you are conducting research with a faculty mentor, you'll still check in on Canvas about your project, and complete the assignments that build to the final deliverables (e.g., literature review, project plan, etc).

Every capstone project will be different! The goal is to meet the learning objectives listed above, and for you to complete a project that enhances and encapsulates the critical information, experiences, and knowledge you gained during your degree program that will help you in your next steps after your graduation.

Examples of past Capstone projects and course information can be found at the [PLS Capstone Website](#).

Communication

Please use the CANVAS emails. Student emails will be answered within 48 hours where possible. We all receive a lot of emails so if it's an urgent matter be sure to state that in the subject line.

Course Website

This course has a site in the CANVAS platform. Take time to familiarize yourself with the “Start Here” and “Syllabus” tabs on the “Home” page. You can find the instructor’s contact information in both of these tabs. The pre-recorded lectures, handouts, and assignments will be released throughout the semester on the module pages. All other assignments will need to be uploaded into CANVAS.

Technical Support

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number. The UF Helpdesk is available 24 hours a day, 7 days a week. <https://helpdesk.ufl.edu/> | 352-392-4357

Textbooks, Learning Materials, and Supply Fees

No textbooks required, no supply fees, and we will have links to helpful reading and other material in Canvas.

Assessment

Due dates are posted in canvas, and are intended to help you navigate the project in a paced manner. If you’re unable to meet a deadline, please let me know as soon as possible and we can discuss an extension. **If an assignment is turned in late without prior discussion, 2 points will be deducted per day.**

Canvas submissions

The accepted format for assignments will be noted on the assignments. If there is a problem with the class Canvas page or computer malfunctions occur, you can email your assignments to me directly if you are concerned about meeting deadlines. Please inform me of these situations when you notice them so that I can correct or adjust as needed.

Grading Policy

Course grading is consistent with [UF grading policies](#).

TOTAL POSSIBLE POINTS & GRADES = 700 pts

Chats: *Required, graded, worth a total of 30 points*

The chats are one-on-one discussions with the instructor, to explore project ideas, career aspirations, and general support as you prepare to graduate.

1. Intro Chat, *15 points*
2. Mid-point Chat, *15 points*

Check-ins 1-6: *Required, graded, worth a total of 270 points*

Five check-in submissions with due dates are spaced throughout the semester to keep your momentum going, provide feedback for you, and build up to the final project. Deadlines are posted to Canvas.

1. Project Idea, *50 points*

2. Project Plan, 50 points
3. Update, 20 points
4. Deliverable Outline, 50 points
5. Peer Review, 50 points
6. Poster Draft, 50 points

Major Assignments: Required, Graded, worth a total of 400 points

Detailed descriptions, due dates, and grading guidelines are posted on Canvas.

1. Literature Review, 100 pts

Three to five page literature review of your topic of choice, exploring the current state of knowledge for your project, and how your effort this semester will contribute new knowledge or solve a problem.

2. Capstone Project Deliverable, 100 pts

The project format is up to the student and what works best for the topic. It can be a traditional experimental research report or technical paper suitable for journal publication, an in-depth research proposal, extension/educational curriculum, production/management protocol, farm plan, policy paper, or another deliverable format suitable for the student's program goals and interests.

3. Capstone Poster, 100 pts

The poster must follow a format suitable for a research or professional conference and summarize the findings, research, and content of the deliverable. Final posters will be posted to the course website.

4. Capstone Talk, 100 pts

The flash talk will be a 2-3-minute summary of your capstone project and process. It can be recorded and submitted, or presented live at the Spring Festival.

Class Schedule		
<i>Subject to change! See here and Canvas for the current schedule, assignments, and dates-these may change from what's posted here. If a discrepancy exists, defer to Canvas dates.</i>		
Week #	Topic	Assignment Due
1	Course Introduction and Brainstorming	Intro Chat
2	- Getting Started: Generating Questions - Literature Reviews and Plagiarism	Check-in 1: Project Idea
3	Creating an Implementation Plan	Check-in 2: Project Plan
4	Literature Review Discussions	Literature Review
5	Project Management Tools and Tricks	Mid-point Chat
6	Scientific Writing: An Introduction	
7	Writing Methods	Check-in 3: Update!
8	The Review Process	

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Week #	Topic	Assignment Due
9	Figures and Formatting and Data, Oh My!	Check-in 4: Outline of Deliverable
10	Giving and Receiving Critique	Check-in 5: Peer review
11	Poster Design	Check-in 6: Poster Draft
12	Effective Presentations and Flash Talks	
13	Feedback Sessions	
14	Thanksgiving Holiday Week	
15	Pulling it all together!	Flash Talk, Final Poster, Capstone Deliverable

Attendance and Make-up Work

Your active participation will be key to your success in the course, and each aspect of the class is designed to support your learning. If you know you will be unable to submit assignments or participate in class, please let me know via Canvas as soon as possible. Requirements for class attendance and make-up work in this course are consistent with university policies. [Click here to read the university attendance policies.](#)

ONLINE COURSE EVALUATION PROCESS

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>.

Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

ACADEMIC HONESTY

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and

integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

SOFTWARE USE

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

SERVICES FOR STUDENTS WITH DISABILITIES

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The DSO will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

CAMPUS HELPING RESOURCES

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu
 - Counseling Services
 - Groups and Workshops
 - Outreach and Consultation
 - Self-Help Library
 - Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>

- Student Success Initiative, <http://studentsuccess.ufl.edu>

STUDENT COMPLAINTS

Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>

Online Course: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>