Senior Design CEN/CIS 4914

Academic Term: Fall 2025

Instructor:

Sanethia Thomas, Ph.D.

sanethiat@ufl.edu

Office Location MH 5119

Office Hours: Tuesdays 6:00-7:00pm via zoom

To request additional office hours, https://calendly.com/drsanethiathomas meeting/dr sanethiathomas

Teaching Assistant: Shaina Murphy, shainanmurphy@ufl.edu; Jasmine McKenzie, jasminemckenzie@ufl.edu

Class Periods: Classes are mandatory and will be held via Zoom on the following dates during period 10.

Location: https://ufl.zoom.us/my/drsanethiathomas

Class #1 8/26 (online P10 5:10pm -6:00pm).

Class #2: 9/9 (online P10 5:10pm -6:00pm)

Class #3: 9/23 (online P10 5:10pm -6:00pm)

Class #4: 10/7 (online P10 5:10pm -6:00pm)

Class #5: 10/21 (online P10 5:10pm -6:00pm)

Class #6: 11/4 (online P10 5:10pm -6:00pm)

Class #7: 11/18 (online P10 5:10pm -6:00pm)

Class #8: 12/2 (online P10 5:10pm -6:00pm)

Senior Showcase 11/20 5:00pm-8:00pm: Reitz Union G320/G325 For residential students

Online Senior Showcase 11/21 5:00pm-6:00pm(Synchronous Zoom) For online students

Course Description

This course involves completing a software project. In this course, students will design and develop a software application or contribute to a software-related project. The course facilitator will guide course requirements. Students will work in a team-based environment directly with their faculty advisor throughout the course. The course facilitator will grade how well you complete the assignments according to the rubrics; the faculty advisor will grade your technical expertise and implementation.

^{*}If your team has both online and residential students, each student is required to attend their respective enrolled Senior Showcase. Only exception given if online student comes to campus.

Course Pre-Requisites

CISE senior standing – Final Semester and approved project proposal.

Course Objectives

- Develop openness to new ideas in computer science, develop the ability to draw reasonable inferences from observations and learn to formulate and solve new computer science problems using analytical and problem solving skills;
- Develop the ability to synthesize and integrate information and ideas, develop the ability to think creatively, develop the ability to think holistically and develop the ability to distinguish between facts and opinion;
- Develop the ability to work individually and as part of a team, develop a commitment to accurate work, develop management skills, improve speaking and writing skills, improve the ability to follow directions, instructions and plans, and improve the ability to organize and use time effectively;
- Develop a commitment to personal achievement, the ability to work skillfully, informed understanding of the role of science and technology, a lifelong love of learning, and cultivate a sense of responsibility for one's own behavior and improve self-esteem/self confidence.

Materials and Supply Fees

There is no supply fee for this course.

Relation to Program Outcomes (ABET):

Outcome		
1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	High	
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	High	
3. An ability to communicate effectively with a range of audiences	High	
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	High	
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	High	
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	High	
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	High	

Required Textbooks and Software

No textbook is required for this course.

Course Schedule The following is a TENTATIVE overview of the course schedule (subject to change):

Week	Dates	Class/Assignments
0	8/21-8/23	Fall Semester Begins
1	8/24 - 8/30	Class #1 8/26
2	8/31 – 9/6	Team Contract Due 9/2; Weekly Report Due 9/5

3	9/7 – 9/13	Project Proposal Due 9/9; Class #2 9/9; Weekly Report Due 9/12
4	9/14 – 9/20	Weekly Report Due 9/19
5	9/21 – 9/27	Class #3 Discussion 9/23; Weekly Report Due 9/26
6	9/28 - 10/4	Weekly Report Due 10/3
7	10/5 – 10/11	Presentation 1 Due 10/7; Class #4 10/7; Weekly Report Due 10/10; Peer Evaluation Due 10/10
8	10/12 - 10/18	Weekly Report Due 10/16
9	10/19 – 10/25	Class #5 Discussion 10/21 Weekly Report Due 10/24
10	10/26 - 11/1	Weekly Report Due 10/31
11	11/2 – 11/8	Presentation 2 Due 11/4 Class #6 11/4; Weekly Report Due 11/7
12	11/9 – 11/15	Weekly Report Due 11/14
13	11/16 – 11/22	Class #7 Discussion 11/18 Senior Showcase 11/20 (Residential) 11/21 (Online)
14	11/23 – 11/29	Holiday Break
15	12/1 – 12/3	Class #8 12/2 Final Project, Demo and Documentation Due 2/2; Peer Evaluation Due 2/3

Attendance Policy, Class Expectations, and Make-Up Policy

Assignments are due by the time listed on Canvas. Assignments can be turned in late with a cascading deduction: one (1) business day from the canvas date is 10% penalty; two (2) business days from the canvas date is 30% penalty; or three (3) business days from the canvas date is 60% penalty. Assignments submitted after 11:59pm on a due date of Friday are considered late if turned in at 12:00am on Saturday and will be considered 1 day late until Monday 11:59pm. Assignments will not be accepted after 3 business days. Weekly reports and Peer Evaluations are NOT ACCEPTED LATE. Weekly Reports and Peer Evaluations must be turned in by the due date to receive credit.

Requirements for make up assignments, and other work in this course are consistent with university policies that can be found at Attendance Policies.

Assignments will be graded 3 weeks after they are submitted.

Grade reviews must be requested by email within one week of a grade being posted. After one week, grades will be not revisited.

Peer Evaluations. Each team member will score their team members and themselves. They are to provide a rating and justification of the rating. A team member who has an average peer evaluation score of 70-79.9 will receive a 15% penalty for the associated assignments. A team member who has an average peer evaluation score of less than 70 will receive a penalty determined by the professor of the course considering the evaluated contribution and justification provided by their team members. Peer evaluations must be completed to receive a peer evaluation score.

For matters directed to the professor, email the professor directly.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Getting Help

Technical Difficulties

For all issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Code Submissions

Functionality is key to success in software development and computer science, so it is **extremely important** that the guidelines are followed. Failure to follow these instructions will result in penalties.

- Your code should be maintained in Github.
- Comment out if used outside sources.
- Code must compile / run in debug and release mode. Debug information should never be released in the final version of a software project. **Projects that do not compile AND run will be graded accordingly**.
- Include only those files specified by the documents in your archive. Projects should have no directory structure except as explicitly mentioned in the documentation (i.e., relevant files and folders should be submitted in the root of the zip file.) It should be possible to open the archive, copy your files directly into the project, compile, and then run the project without further steps. If the project has naming or organization error(s), its grade will be zero.

Evaluation of Grades

Grade Category	Grader	Percentage
Participation and Assignments	Course Instructor	15%
Project Proposal	Course Instructor	5%
Presentation 1	Course Instructor	15%
Presentation 2	Course Instructor	15%
Documentation	Advisor	10%
Project	Advisor	30%
Individual Contribution	Advisor	10%
Total		100%

^{**}Any requests for make-ups due to technical issues should be accompanied by the ticket number received from the Help Desk. The ticket number will document the time and date of the problem. You should e-mail your instructor immediately of the technical difficulty if you wish to request a make-up.

Grading Policy

Range (%)	
A 94 – 100	
A- 90 – 93	
B + 87 - 89	
B 84 – 86	
B-80-83	
C+ 77 – 79	
C74 - 76	
C-70-73	
D+ 67 – 69	
D 64 – 66	
D- 60 – 63	

NOTE: A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: an average of C- is equivalent to a GPA of 1.67 and therefore does not satisfy this graduation requirement. For more information on grades and grading policies, please consult <u>the catalog</u>.

Tips for Success

Here are some tips that will help you get the most of this course:

- Schedule "class times" for yourself. It is important to do the coursework on time each week. You will receive a reduction in points for work that is turned in late!
- Read ALL of the material contained on this site. There is a lot of helpful information that can save you time and help you meet the objectives of the course.
- Print out the Course Schedule located in the Course Syllabus and check things off as you go.
- Take full advantage of office hours. Ask for help or clarification of the material if you need it.
- Do not wait to ask questions! Waiting to ask a question might cause you to miss a due date.
- Do your work well before the due dates. Sometimes things happen. If your computer goes down when you are trying to submit an assignment, you'll need time to troubleshoot the problem.
- To be extra safe, back up your work to an external hard drive, thumb drive, or through a cloud service.

^{*}Link to academic policies and campus resources: https://go.ufl.edu/syllabuspolicies.