Senior Design Project Course Syllabus

Contact Information

Instructor: Sanethia Thomas, PhD

Email: sanethiat@ufl.edu

Office Hours: To book office hours, visit calendly.

For questions about course content, your grade, or other personal issues, use the Canvas mail tool. Expect a response within **48 business hours**.

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

Course Description

This course involves completing a significant CEN-related project. In this course, you will synthesize what you have learned in your other CISE courses by developing a semester-long project to solve real-world problems and develop research and development skills. This is an opportunity for you to put into practice the skills and techniques that you have learned during your undergraduate studies. Students will conduct the design and development of a significant software system or module. This kind of experience is familiar to Computer Science and Computer Engineering majors who have worked in industry and government after having received their baccalaureate degrees. Thus, the class will bear directly upon practical experience and job skills.

Course Requirements

Required Textbook

No textbook is required for this course.

Prerequisites

CISE senior standing and approved project proposal.

- For CIS4914, the proposal is instantiated as a registration form.
- For CEN4914 the prerequisite is CEN 3913, which includes the preparation and submission of the project proposal and registration form).

Minimum Technology Requirements

The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to their degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- Webcam
- Microphone
- Broadband connection to the internet and related equipment (cable/DSL modem)
- Microsoft Office Suite installed (provided by the university)

Individual colleges may have additional requirements or recommendations, which students should review before starting their program.

Minimum Technical Skills

To complete your tasks in this course, you will need a basic understanding of operating a computer and using word processing software.

Materials/Supply Fees

There is no supply fee for this course.

Zoom

Zoom is an easy-to-use video conferencing service available to all UF students, faculty, and staff that allows for meetings of up to 100 participants.

You can find resources and help using Zoom at the UF website.

Course Objectives

By the end of this course, you will be able to:

- Develop an 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;
- 2. 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;
- 4. Develop a commitment to personal achievement, the ability to work skillfully, an 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.

Course Information

Relation to Program Outcomes (ABET):

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

- 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
- 3. An ability to communicate effectively with a range of audiences
- 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
- 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
- 6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- 7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Grading Policy

Percent	Grade	Grade Points
94-100	A	4.00
90-93	A-	3.67
87-89	B+	3.33
84-86	В	3.00
80-83	B-	2.67
77-79	C+	2.33
74-76	С	2.00
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1.00

60-63	D-	0.67
0-62	E	0.00

Assignment Point Values

Assignment	Points
Project Proposal	5%
Presentation 1	15%
Presentation 2	15%
Final Presentation	20%
Peer Feedback Discussions	5%
Poster	20%
Project Submission and Documentation	20%
Total	100%

Grading Scale

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 me directly.

Your work will be graded within 2 weeks of the assignment's due date.

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.

• 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.

Course Policies

Netiquette

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Failure to follow netiquette may result in a grade reduction. Students should be sure that they understand the course policy.

Due dates

As this is an online class, you are responsible for observing all posted due dates and are encouraged to be self-directed and take responsibility for your learning.

Assignments are due by the time listed on Canvas. Assignments and project work can be turned in late with a cascading deduction:

- One (1) business day from the canvas date: 10% penalty
- Two (2) business days from the canvas date: 30% penalty
- Three (3) business days from the canvas date: 60% penalty.

Assignments submitted after 11:59 pm on due date of Friday are considered late if turned in at 12:00 am on Saturday and will be considered 1 day late until Monday at 11:59 pm. Assignments will not be accepted after 3 business days.

Grade reviews

Grade reviews must be requested by email within one week of a grade being posted. After one week, grades will be revisited.

Peer Evaluations

Each team member will score their team members and themselves. They are to provide a rating and justification for 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.

Course Evaluation

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 on the UF site.

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 . Summaries of course evaluation results are available to students.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Makeup Policies

Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found on canvas website.

Academic Dishonesty

Academic Dishonesty will be dealt with strictly. Sharing/copying and "borrowing" work that is not your own original work are considered academic dishonesty. Code structure, discussing code structure, looking at code from another student or providing such code, and plagiarism, in addition to other dishonest behaviors, are all considered academic dishonesty. Absolutely no information regarding assignment solutions may be shared by students except at a conceptual level. If students implement algorithms from other sources, they must cite those sources.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Jennifer Nappo, Director of Human Resources, 352-392-0904, jpennacc@ufl.edu
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

University Policies

University Policy on Accommodating Students with Disabilities

Students with disabilities requesting accommodations should first register with the

(352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

University Policy on Academic Conduct

UF students are bound by The Honor Pledge, which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code." On all work submitted for credit by students 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." The

specify a number of behaviors that are in violation of this code and possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Plagiarism

"A Student must not represent as the Student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

- Stealing, misquoting, insufficiently paraphrasing, or patch-writing.
- Self-plagiarism, which is the reuse of the Student's own submitted work, or the simultaneous submission of the Student's own work, without the full and clear acknowledgment and permission of the Faculty to whom it is submitted.
- Submitting materials from any source without proper attribution.
- Submitting a document, assignment, or material that, in whole or in part, is identical or substantially identical to a document or assignment the Student did not author."

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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regard to grades earned in courses and on individual assignments. For more information, please see:

Privacy and Accessibility Policies

For information about the privacy policies of the tools used in this course, see the links below:

Instructure (Canvas)

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• Zoom

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• YouTube (Google)

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Microsoft

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Adobe

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• UF Apps (SPSS Statistics)

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• Tips for Success

Taking a course online can be a lot of fun! Here are some tips that will help you get the most of this course while taking full advantage of the online format:

- 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 Summary located in the Course Syllabus and check things off as you go.
- Take full advantage of the online discussion boards. 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.

Getting Help

Technical Difficulties

For help with technical issues or difficulties with Canvas, please contact the UF Computing Help Desk at:

- http://helpdesk.ufl.edu
- Links to an external site.
- 352-392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups (assignments, exams, etc.) due to technical issues should be accompanied by the ticket number received from the UF Computing Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You should email your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Health and Wellness

- **U Matter, We Care**: If you or someone you know is in distress, please email umatter@ufl.edu, call 352-392-1575, or visit
- to refer or report a concern, and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the
- website or call 352-392-1575 for information on crisis services and non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the
- website.
- Sexual Discrimination, Harassment, Assault, or Violence: If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the
 - , located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu
 - Sexual Assault Recovery Services (SARS): Student Health Care Center, 392-1161.
 - University Police Department: Visit the
- website or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room/Trauma Center:** For immediate medical care in Gainesville, call 352-733-0111, or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the
 - website.

ACADEMIC RESOURCES

• **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml

- Links to an external site..
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling; https://career.ufl.edu
- Links to an external site..
- Library Support, http://cms.uflib.ufl.edu/ask
- <u>Links to an external site.</u>. Various ways to receive assistance with respect to using the libraries or finding resources.
- **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/
- Links to an external site..
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/
- Links to an external site..
- Student Complaints Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/ Links to an external site.;https://care.dso.ufl.edu
- Links to an external site..
- On-Line Students Complaints: https://distance.ufl.edu/state-authorization-status/#student-complaint
 - Links to an external site..

Disclaimer

By taking this course, you agree to read the syllabus carefully and abide by its terms. I, too, will adhere to the rules and procedures. I do, however, reserve the right to adjust as needed. Every class is unique, and new challenges often arise; therefore, flexibility might be required. Should there be an alteration that affects grading or course planning, I will announce the change and provide an amended syllabus to you.