# CIS/CEN 4914 - Senior Project / CISE Design 2

CIS/CEN4914 Sections 0711 & 6750 Credits: 3

Class Periods: Meetings are Irregular, to be announced via Canvas

Location: CSE/E404 (meetings and presentations) and CSE/E440 (presentations)

Academic Term: Fall 2021

**Instructor** – Dr. Mark Schmalz

a. Office location: CSE/E446b. Telephone: 352-294-6668

c. E-mail address: mssz@cise.ufl.edu

d. Office hours: Posted on Instructor Website: http://www.cise.ufl.edu/~mssz/

#### TAs-

a. Name: **London Thompson** 

b. Office: TBAc. Phone: TBA

d. Email: <u>london.thompson@ufl.edu</u>
e. OfcHrs: via Zoom, TBA via Canvas

**Course Description** – (3 credits) Involves completing a significant CEN-related project. Coordinate with the instructor and a project advisor, prepare a detailed technical report and deliver an oral presentation.

**Course Pre-Requisites** / **Co-Requisites** – CISE senior standing and approved project proposal. (For CIS4914, proposal is instantiated as a registration form. For CEN4914 the prerequisite is CEN 3913, which includes preparation and submission of the project proposal and registration form).

**Course Objectives** – In Senior Project and CISE Design 2, you will synthesize what you have learned in your other CISE courses by creating and finishing a semester-long project. This is an opportunity for you to put into practice the skills and techniques that you have learned during your undergraduate studies. CEN4914 students will have designed their project and begun development in CEN3913.

Students will conduct design and development of a significant software system or module. Students will have the responsibility of meeting deadlines and, sometimes, dealing with incomplete problem specifications. This kind of experience is one 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.

Students will prepare deliverables for the course including:

- A significant software product, with possible hardware components
- A written technical report on your work
- Three oral presentations

## CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

• Meetings and e-mail documentation with your advisor to ensure that you are "on track."

You must read your e-mail frequently to stay in touch with your *advisor* and *course coordinator* (Dr. Schmalz) when appropriate. The coordinator will periodically send out Canvas announcements to all seniors taking CIS 4914, concerning meeting announcements, presentation dates, etc. You are completely responsible for knowing these dates, and appearing at meetings and presentations *on time*, *fully prepared*, and *with the appropriate materials*.

Materials and Supply Fees – Students are responsible for defraying costs of their project, beyond availability of such software as may be provided by the CISE Department or University of Florida.

**Required Textbooks and Software** – No textbook required. Instructor will provide all course materials at no additional charge via Canvas or the Internet. For other materials, see *Materials and Supply Fees*, above.

**Recommended Materials** – Students will have and use their laptop computer throughout this course. Recommended software will be discussed in-class and via Canvas webpages specific to this course. Additional materials associated with each student's project are the responsibility of the student, as discussed in "Materials and Supply Fees", above.

## **Relation to Program Outcomes (ABET) –**

Ου	Coverage*	
1.	An ability to identify, formulate, and solve complex engineering problems	High
	by applying principles of engineering, science, and mathematics	
2.	An ability to apply engineering design to produce solutions that meet	High
	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	High
4.	An ability to recognize ethical and professional responsibilities in	High
	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	High
	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	High
	interpret data, and use engineering judgment to draw conclusions	
7.	An ability to acquire and apply new knowledge as needed, using appropriate	High
	learning strategies	

<sup>\*</sup>Coverage is given as high, medium, or low. An empty box indicates that this outcome is not covered or assessed in the course.

## CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

Course Schedule (work on your project, presentations, and report throughout the semester)

Week	Topic
1	Begin Working on Your Project Immediately
2	Meeting #1: Details of Course Organization, Objectives, Expectations, Evaluation of Grade (Meeting time and location to be announced via Canvas)
3-4	Meeting #2: Details of Time Management and Presentation Skills (Meeting time and location to be announced via Canvas)
5-6	Presentation #1: Concept Review (5 minutes + setup and setdown time) (Presentation time, location, and format to be announced via Canvas)
9-11	Presentation #2: Design Review (5-8 minutes + setup and setdown time) (Presentation time, location, and format to be announced via Canvas)
14	<b>Deliver Final Report to Project Advisor:</b> Do this at least one week before Final Presentation (Report format to be announced via Canvas)
15	Advisor-Graded Final Report: Provide this (with ABET forms) at your Final Presentation (Forms and directions for filling them out to be provided via Canvas)
15	Presentation #3 (Final Presentation): Project Results (8-12 minutes + setup&setdown time) (Presentation time, location, and format to be announced via Canvas)

Attendance Policy, Class Expectations, and Make-Up Policy – Attendance for class meetings is expected. Failure in regular attendance may result in deductions to grade. Contact your instructor if you have an excused absence to work out a plan to make up the work. Excused absences must be consistent with university policies in the undergraduate catalog (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) and require appropriate documentation.

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: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</a>

#### **Evaluation of Grades**

Grades are determined by the quality of work with the following items. In order to **pass** the class, students **must finish** their project, provide a Final Report to their advisor, provide the Advisor-Graded Final Report at the time of their Final Presentation, and present their project work in three presentations. Therefore the last two items on the below list will be emphasized.

- Midterm Presentation #1 (Concept Review) (ungraded, mandatory presentation)
- Midterm Presentation #2 (Design Review) (5% of Final Grade)
- ➤ Presentation #3 (Final Presentation of Results) (18% of Final Grade)
- Final Advisor Score Complexity, Completeness, Quality of Results (30% of Final Grade)
- ➤ Final Report (20% of Final Grade from Project Advisor, 27% of Final Grade from Course Coordinator [Instructor or TA])

### CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

## **Summary**

Assignment	Coordinator	Advisor	Total	Percentage of Final
	Points	<b>Points</b>	Points	Grade
Midterm Pres'n. #1	0	0	0	0%
Midterm Pres'n. #2	5	0	5	5%
Final Advisor Score	0	30	30	30%
Final Report	27	20	47	47%
Final Presentation	18	0	18	18%
TOTAL	50	50	100	100%

## **Grading Policy**

Percent	Grade	Grade
		Points
93.4 - 100	Α	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	В	3.00
80.0 - 83.3	B-	2.67

76.7 - 79.9	C+	2.33
73.4 - 76.6	С	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

## **Students Requiring Accommodations**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <a href="https://disability.ufl.edu/students/get-started/">https://disability.ufl.edu/students/get-started/</a>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

#### **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 at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

### **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

## CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

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.

## **University Honesty Policy**

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 honor 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 Conduct Code (<a href="https://sccr.dso.ufl.edu/process/student-conduct-code/">https://sccr.dso.ufl.edu/process/student-conduct-code/</a>) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor or TAs in this class.

## 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

## CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

### **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 regards to grades earned in courses and on individual assignments. For more information, please see: <a href="https://registrar.ufl.edu/ferpa.html">https://registrar.ufl.edu/ferpa.html</a>

### **Campus Resources:**

## **Health and Wellness**

### U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

**Counseling and Wellness Center:** <a href="https://counseling.ufl.edu">https://counseling.ufl.edu</a>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

### 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 <u>Office of Title IX Compliance</u>, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, <u>title-ix@ufl.edu</u>

#### Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or <a href="http://www.police.ufl.edu/">http://www.police.ufl.edu/</a>.

#### COVID-19

- You are expected to wear approved face coverings at all times during class and within buildings even if you are vaccinated.
- If you are sick, stay home and self-quarantine. Please visit the UF Health Screen, Test & Protect website about next steps, retake the questionnaire and schedule your test for no sooner than 24 hours after your symptoms began. Please call your primary care provider

## CIS/CEN 4914 - Senior Project / CISE Design 2 - Spring 2022

if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 (or email <a href="mailto:covid@shcc.ufl.edu">covid@shcc.ufl.edu</a>) to be evaluated for testing and to receive further instructions about returning to campus.

- If you are withheld from campus by the Department of Health through Screen, Test & Protect, you are not permitted to use any on campus facilities. Students attempting to attend campus activities when withheld from campus will be referred to the Dean of Students Office.
- UF Health Screen, Test & Protect offers guidance when you are sick, have been exposed to someone who has tested positive or have tested positive yourself. Visit the <a href="UF Health">UF Health</a> Screen, Test & Protect website for more information.
- Please continue to follow healthy habits, including best practices like frequent hand washing. Following these practices is our responsibility as Gators.

## Academic Resources

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

**Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling; <a href="https://career.ufl.edu">https://career.ufl.edu</a>.

**Library Support**, <a href="http://cms.uflib.ufl.edu/ask">http://cms.uflib.ufl.edu/ask</a>. 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. <a href="https://teachingcenter.ufl.edu/">https://teachingcenter.ufl.edu/</a>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers. <a href="https://writing.ufl.edu/writing-studio/">https://writing.ufl.edu/writing-studio/</a>.

**Student Complaints Campus**: <a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/;https://care.dso.ufl.edu">https://sccr.dso.ufl.edu</a>/policies/student-honor-code-student-conduct-code/;<a href="https://care.dso.ufl.edu">https://care.dso.ufl.edu</a>/policies/student-honor-code-student-conduct-code/;<a href="https://care.dso.ufl.edu">https://care.dso.ufl.edu</a>/policies/student-honor-code-student-honor-code-student-honor-code-student-honor-code/;</a>

On-Line Students Complaints: <a href="http://www.distance.ufl.edu/student-complaint-process">http://www.distance.ufl.edu/student-complaint-process</a>.