Course Syllabus

Course	CS 4485.001/002
Course Title	Computer Science Project
Professor	Drs Miguel Razo & Jey Veerasamy
Term	Spring 2022
Meetings	Friday 4:00 PM - 6:45 PM, ECSW 1.315/FN 2.102

Professor's Contact Information

Office Phone	972-883-4240 (Dr. Razo)
Other Phone	972-883-4241 (Dr. Veerasamy)
Office Location	Remote/Virtual
Email Address	mrazo@utdallas.edu; jeyv@utdallas.edu
Office Hours	Dr. Razo Mon & Wed 11:30 AM - 12:30 PM - MS Teams. Use this MS Teams link
Other Information	Make sure to send your email to mrazo@utdallas.edu using the subject CS4485

Course Modality and Expectations

Instructional Mode	Traditional Classroom/Laboratory
Course Platform	Team meetings and meeting with the sponsor will be defined once the project is assigned.
Expectations	Read Student Conduct and Discipline, use proper classroom etiquette and language

COVID-19 Guidelines and Resources

The information contained in the link lists the University's COVID-19 resources for students and instructors of record.

Please see http://go.utdallas.edu/syllabus-policies

Classroom Conduct Requirements Related to COVID-19

UT Dallas requires that all students must wear a face covering that covers the nose and mouth in all university buildings and classrooms. To help protect the health and safety of students, instructors, and the University community, students who choose not to wear a face covering may not attend class in person but may attend a course remotely. Anyone attending class in person without a face covering will be asked to put one on or leave. Instructors may end the class if anyone present refuses to appropriately wear a face covering for the duration of class. Students should also be sure they are at least six feet

away from their fellow students and faculty, and seated in a seat that is designated to ensure that distance. Students who either refuse to wear face coverings appropriately or to adhere to other social distancing protocols may face disciplinary action for Student Code of Conduct violations. Students who are unable to comply with the university policies including wearing a face covering should consult the Comets United webpage for further instructions.

Students who have tested positive for COVID-19 or may have been exposed should not attend class in person and should instead follow required disclosure notifications as posted on the university's website (see "What should I do if I become sick?" webpage)

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected regardless of modality. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. These attendance requirements will not be used as part of grading (see Class Participation below for grading information).

In-person participation records may be used to assist the University or local public health authorities in performing COVID-19 occurrence monitoring. Please note – in-person attendance requires consistently adhering to University requirements, including wearing a face covering and other public safety requirements related to COVID-19, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly

prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

NOTE: if the instructor records any part of the course, then the instructor will need to use the following syllabus statement:

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Materials

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

General Course Information

Pre-requisites, Co-requisites, & other restrictions

Prerequisite: CS/SE 3345, CE/CS/SE 3354 and at least three CS 43xx courses

Course Description

This course is intended to complement theory and to provide an in-depth, hands-on experience in all aspects of a software development project. Students will work in teams on projects of interest to industry and will be involved in specifying the problem and its solution, designing, and analyzing the solution, developing the software architecture, along with implementation and testing plans. The deliverables will include reports that document these steps as well as a final project report and a user manual of the developed system. Teams will also make presentations during the class as well as demonstrate their software

Class learning objectives

Students that successfully complete this class will have the:

- Ability to write detailed requirements from a customer's minimal project specification
- Ability to do requirements analysis with a customer
- Ability to write a project proposal based on the refined requirement specification
- Ability to work in a team and contribute to a team software design project
- Ability to work in a team and contribute to the production of an enterprise software product
- Ability to meet milestones and final goals in a team environment
- Ability to write a final report fully documenting the design of a software design project
- Ability to present to others the work of the team
- Ability to independently research and learn new programming languages, platforms, and/or design approaches required to develop industrial applications

Suggested Texts, Readings, & Materials

All materials as provided in class/class web page

Assignments & Academic Calendar

- Team will meet with Faculty advisor (weekly) and company mentor (at least once a week), depending on project.
- **Weekly reports will be submitted (individual or as a team). The company mentor and faculty/supervisor will decide the deadline, content, and format.**
- Regular meetings will include (Tentative):

Session	Topic	Classroom
Jan 21	Pre-Requisite Verification Form and Student Agreement Form due (eLearning/Individual)	eLearning
Jan 21	First day of Senior Design class! (Form your team) Resume Submission Due (eLearning/Individual)	Virtual - MS Teams
Jan 28	Class canceled to facilitate all the kickoff meetings!	
Feb 4	Project Management	Video Lecture (Virtual – MS Teams)
Feb 11	Leadership & Ethics	Video Lecture (Virtual – MS Teams)
Feb 18	Entrepreneurship	Virtual - MS Teams
March 4	Project Proposal and Mid Semester Peer Review **Plan ahead: No deadline extensions.** Sponsor Midterm Grade Feedback Due (email to mrazo@utdallas.edu)	-- Soft Copy (pdf or doc/docx) of the signed proposal (eLearning/Team) -- Peer Review CATME (OnLine/Individual)
…	Classes canceled all the way to April last week so that you can use class time to focus on the project.	--
Apr 29	Poster, Single Slide and Presentation Script – eLearning/Team Sponsor Approval Form (Signed) – eLearning/Team	-- Submit Poster/Slide (ppt/pptx) and Sponsor Approval Form (pdf /doc) by April 29 @ 4 PM on eLearning/Team
May 6	Final Report Final Peer Review(online) **Plan ahead: No deadline extensions.** Sponsor Final Grade Feedback Due (email to mrazo@utdallas.edu)	-- Final Report (eLearning/Team) -- Peer Review CATME (OnLine/Individual)
May 7	Senior Design Day - Team's oral presentations	Virtual – MS Teams (9 AM to 1 PM)

Course Policies

Grading (credit) Criteria	- Quizzes/Surveys and Attendance - Project Proposal: (Midterm grade) - Final Report includes: Design document, Test plan/test cases, Implementation, Testing, user manual, Sponsor Approval Form, poster & one-slide, presentation) **Final grade is based on the final report (FR), oral presentation/poster session (**P), sponsor/faculty advisor feedback (SF/FAF) and peer review (PR) Review the intro slides for details: FG~=FR*(AVERAGE(SF, FAF)*0.85+P*0.1+PR*0.05)
Late Work	**No late homework or partial credit**
All other policies	**Please visit http://go.utdallas.edu/syllabus-policies for other policies**

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.

Tentative Calendar. Deadlines are subject to change. Please check the announcements on eLearning

Spring 2022 - CS 4485 - Timeline

Start Date: 1/3/2022

Activity	Description	January						February				March				April					May		Notes		
		mon	fri	fri	sun	wed	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	fri	sat			
		3	14	21	23	26	28	4	11	18	25	4	11	18	25	1	8	15	22	29	6	7			
		-2	-1	1	2	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16			
0	Section Available on eLearning		0																				Review available projects	PROJECT ASSIGNMENT	Project descriptions are made available and students review them. Students form teams and submit preferences online. Project is assigned to teams and the kickoff meeting is scheduled.
1	First Day of Classes			1																			Form a team & discuss projects & submit resume and pre req form		
2	Team Registration				2																		Submit team information and project preferences		
3	Project Assignment					3																	**Contact the sponsor and schdedule kick-off meeting**		
4	Kick - off Meeting						4																**Kick off meeting must be at least scheduled by this date**	PROJECT SCOPE	After the kickoff meeting, regular meetings are scheduled. The project sponsor and the team define the project scope through requirement gathering and analysis. The mentor decides on the software development approach and roles. Weekly meetings and reports are set.
5	Lecture 1: Project Management							5															**1st weekly report**		
6	Lecture 2: Ethics and Leadership								6														**2nd weekly report**		
7	Lecture 3: Entrepreneurship - M1									7													3rd weekly report		
8	Lecture 4: Entrepreneurship - M2										8												4th weekly report		
9	Lecture 5: Entrepreneurship - M3											9											5th weekly report		
10	Mid Semester Peer Review											10											CATME		
11	Project Proposal											11											**Submit on eLearning**		
12	Teamwork / Collaboration												12										6th weekly report	PROJECT DEVELOPMENT	The team prepares a system design and define the overall system architecture. The team focuses on implementing and integrating the required features. Depending on the development approach, the team might schedule standup meetings, and working sessions with the sponsor to test the software to ensure that its quality is acceptable and serves the intended purpose. Bugs are fixed.
13	Teamwork / Collaboration													13									7th weekly report		
14	Teamwork / Collaboration														14								8th weekly report		
15	Teamwork / Collaboration															15							9th weekly report		
16	Teamwork / Collaboration																16						10th weekly report		
17	Teamwork / Collaboration																	17					11th weekly report		
18	Teamwork / Collaboration																		18				12th weekly report		
19	Poster/Slide/Sponsor Approval Form																			19			Submit on eLearning	PRODUCT DELIVERING	After testing and bug fixing, the final version of the software is delivered to the sponsor. Final presentation to sponsor' stakeholders.
20	Final Peer Review																				20		CATME		
21	Final Report																				21		Submit on eLearning		
22	Senior Design Day - Oral Presentations																					22	**Oral Presentations (MS Teams)**		