Course Syllabus



Course CS 4485.001/002

Course Title Computer Science Project

Professor Drs. Miguel Razo & Jey Veerasamy

Term Fall 2021

Meetings Friday 4:00 PM - 6:45 PM, ECSW 1.315/SCI 1.220

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	Tu & Th 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

General Course Information

Pre-requisites, Corequisites, & other restrictions

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

This course is intended to complement theory and to provide an in-depth, handson 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

Course Description

Students that successfully complete this class will have the:

- 1. Ability to write detailed requirements from a customer's minimal project specification
- 2. Ability to do requirements analysis with a customer
- 3. Ability to write a project proposal based on the refined requirement specification
- 4. Ability to work in a team and contribute to a team software design project

Class learning objectives

- 5. Ability to work in a team and contribute to the production of an enterprise software product
- 6. Ability to meet milestones and final goals in a team environment
- 7. Ability to write a final report fully documenting the design of a software design project
- 8. Ability to present to others the work of the team
- 9. 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

Student Resources

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?")

COVID-19 Resources

Comets United webpage: check frequently

FAQ: check out the FAQs and reach out to your instructor or academic advisor if answers are not included

<u>Student Resources</u>: a variety of resources are available to help students to obtain counseling, health care, and academic support.

Classroom Conduct Requirements Related to Public Health Measures

UT Dallas will follow the public health and safety guidelines put forth by the Centers for Disease Control and Prevention (CDC), the Texas Department of State Health Services (DSHS), and local public health agencies that are in effect at that time during the Fall 2021 semester to the extent allowed by state governance. Texas Governor Greg Abbott's Executive Order GA-38 prohibits us from mandating vaccines and face coverings for UT Dallas employees, students, and members of the public on campus. However, we strongly encourage all Comets to get vaccinated and wear face coverings as recommended by the CDC. Check the Comets United: Latest Updates webpage for the latest guidance on the University's public health measures. Comets are expected to carry out Student Safety protocols in adherence to the Comet Commitment. Unvaccinated Comets will be expected to complete the Required Daily Health Screening. Those students who do not comply will be referred to the Office of Community Standards and Conduct for disciplinary action under the Student Code of Conduct – UTSP5003.

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.

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. 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. Faculty have the discretion to set an attendance policy for their in-person meetings, but the absences due to COVID-19 cannot be counted against a quarantined student.

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 <u>Student Code of Conduct</u>.

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.

The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. 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.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students.

Please see http://go.utdallas.edu/academic-support-resources.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please review the catalog sections regarding the <a href="mailto:credit/no credit/no credit/n

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Assignments & Academic Calendar

-Team will meet with Faculty advisor (weekly) and company mentor (at <u>least once a week</u>), depending on project.

-Individual/team Weekly reports (coordinate with your company mentor and supervisor)

-Regular meetings will include (Tentative):

Session	Topic	Format
Aug 27	Pre Requisite Verification Form	eLearning / Individual
Aug 27	First day of Senior Design class! (Form your team) Resume Submission Due (eLearning/Individual)	In-person/MS Teams
Sep 3	Class canceled to facilitate all the kickoff meetings!	
Sep 10	Project Management	Video Lecture/Assignment
Sep 17	Leadership & Ethics	Video Lecture/Quiz
Sep 24	Entrepreneurship Panel	MS Teams during class time
Oct 8	Project Proposal - eLearning and Mid Semester Peer Review (OnLine) Sponsor Midterm Grade Feedback Due (email to mrazo@utdallas.edu)	Soft Copy (pdf or doc) of the signed proposal (eLearning/Team) Peer Review CATME (OnLine/Individual)
	Classes canceled all the way to November last week so that you can use class time to focus on the project.	
Nov 30	Poster and Single Slide – eLearning Sponsor Approval Form – eLearning	Submit Poster/Slide (ppt/pptx) and Sponsor Approval Form (pdf /doc) by Nov 30 @ 8 AM on eLearning/Team
Dec 3	Poster session (ECS Atrium – 4 PM to 7 PM) Final Report (eLearning) Final Peer Review (OnLine) Sponsor Final Grade Feedback Due (email to mrazo@utdallas.edu)	Final Report (eLearning/Team) Peer Review CATME (OnLine/Individual) Both assignments are due by 10 PM
Dec 4 (Saturday)	Senior Design Day - Team's oral presentations	MS Teams from 9 AM to 12 PM/Team

Course Policies

Grading (credit) Criteria	 - Quizzes/Surveys and Attendance - Project Proposal: (Midterm grade) - Design document, Test plan/test cases, Implementation, Testing, Documentation (user manual, poster & one-slide, presentation) Final grade is based on the final documentation, oral presentation/poster session, sponsor/faculty advisor feedback and peer review
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

Fall 2021 - CS 4485 - Timeline

Start Date: 8/9/2021

				gus				pten					ctob				November				Dec.			•		
Activity	Description	mon 9	20	fri 27	sun 29	wed 1	3	10	fri 17	24	tri 1	B 8		22		fri 5		19	26	tue 30	3	sat 4	Comments			
		-2	-1	1	2	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	15				
0	Section Available on eLearning		0																				Review available projects Form a team & discuss projects & submit resume and pre req	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			
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			
5	Lecture 1: Project Management							5															1st weekly report	_	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.	
6	Lecture 2: Ethics and Leadership								6														2nd weekly report	PROJECT		
7	Lecture 3: Entrepreneurship - M1									7													3rd weekly report	JEC		
8	Lecture 4: Entrepreneurship - M2										8												4th weekly report	T SCOPE		
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	밁		
13	Teamwork / Collaboration													13									7th weekly report	PROJECT	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	
14	Teamwork / Collaboration														14								8th weekly report	CT I		
15	Teamwork / Collaboration															15							9th weekly report	DEVELOPMENT		
16	Teamwork / Collaboration																						10th weekly report		team might schedule standup meetings, and working sessions with the sponsor to test the	
17	Teamwork / Collaboration																	17					11th weekly report		software to ensure that its quality is acceptable and serves the intended purpose. Bugs are fixed.	
18	Teamwork / Collaboration																		18				12th weekly report	Ä		
19	Poster/Slide/Sponsor Approval Form																			19			Submit on eLearning			
20	Final Peer Review																				20	0	CATME	PRODUCT DELIVERING		
21	Final Report																				21	1	Submit on eLearning		After testing and bug fixing, the final version of the software is delivered to the sponsor. Final presentation to sponsor' stakeholders.	
22	Senior Design Day - Poster Session																				22	2	Poster Session (ECSS/ECSN Atrium)			
23	Senior Design Day - Oral Presentations																					23	Oral Presentations (MS Teams)			