SE4351 Spring 2023 - Dr. Klyne Smith

Course Syllabus

Course Information

Course Prefix, Number, Section SE4351.001

Course Title Requirements Engineering

Term: Spring 2023 January 17th – May 3rd

Section 001 (T/TH) - 10:00am-11:15am in ECSS 2.306

Professor Contact Information

Professor Dr. Klyne Smith Cell Phone 972-533-6460

Email Address Klyne.smith@utdallas.edu

Office Location ECSN 3.610 (only during office hours)
Office Hours Thursday's 1pm-2pm and by appointment

Other Information Appointments are available online, phone, and in-person

Course Modality and Expectations

Instructional Mode	In Person -The course will be taught with twice a week face-to-face class combined with online quizzes, exams, and assignments. Class will not be held online nor recorded lectures.
Course Platform	All class material, i.e. HW, Quizzes, Project work, and Exams will be on eLearning (Blackboard).

Course Pre-requisites, Co-requisites, and/or Other Restrictions

CS / SE / CE 3306 and 3354 (Software Engineering)

Course Description

Introduction to system and software requirements engineering. The requirements engineering process, including requirements elicitation, specification, and validation. Instruction of Features and User Stories. Essential words and types of requirements. Structural, informational, and

behavioral requirements. Non-functional requirements. Scenario analysis. Conventional, object-oriented and goal-oriented methodologies.

Student Learning Objectives/Outcomes

- Ability to specify and follow a Requirements engineering process
- Ability to identify and collect requirements from various sources and resolve conflicting requirements
- Ability to specify and validate requirements with traceability
- Ability to model functional and non-functional requirements
- Ability to model and analyze security requirements
- Understand Requirements as it relates to Agile, User Stories, and Features.

Required Textbooks and Materials

Mastering the Requirements Process: Getting Requirements Right (3rd Edition)

by Suzanne Robertson & James Robertson

ISBN-13: 978-0321815743 or ISBN-10: 0321815742

Course Layout

SE 4351 Course Layout - Spring 2023					
Module	Dates	Pre Work	During Class	Post Work	Project Deliverables
			Review Syllabus		
			Review eLearning	Setup team meeting plan	
		Read Syllabus	Review Project Assignments	Submit HW1	Team Profile
		Secure Book	Review HW Assignments	Submit PA1	Statement of Work
	January 17th -	Read Chapters 1-4	Review Test	Complete Module 1 Test	Work Context Diagram
Module 1	February 3rd	Review Team Assignments	Chapter Lecture Chapters 1-4	Team Meetings (Weekly)	Stakeholder Map
			Review Module 1 Test		Business Use Cases
			Review PA2	Submit HW2	Business Events
	February 6th -		Review HW2	Submit PA2	UML Scenarios
Module 2	March 3rd	Read Chapters 5-8	Chapter Lecture Chapters 5-8	Complete Module 2 Test	Challenging Constraints
			·	·	Product Use Cases
			Review Module 2 Test		Functional Requirements
			Review PA2	Submit HW 3	Non-Functional Requirements
	March 6th -		Review HW2	Submit PA3	Business Process Models
Module 3	March 31st	Read Chapters 9-12	Chapter Lecture Chapters 9-12	Complete Module 3 Test	Data Flow Models
					Wireframes
			Review Module 3 Test		Atomic Requirements /
			Review PA2	Submit HW 4	Snowcards
	April 3rd -		Review HW2	Submit PA4	User Stories
Module 4	April 30th	Read Chapters 13-17	Chapter Lecture Chapters 13-16		Snowcard Analysis

Assignments

SE4351 Assignment Dates - Spring 2022			
Project Assignments	Due Date	Due Time	
Project Assignment 1	31-Jan	10am	
Project Assignment 2	28-Feb	10am	
Project Assignment 3	28-Mar	10am	
Project Assignment 4	25-Apr	10am	
Homework Assignments	Due Date	Due Time	
Homework 1	29-Jan	11:30pm	
Homework 2	26-Feb	11:30pm	
Homework 3	26-Mar	11:30pm	
Homework 4	23-Apr	11:30pm	
Tests	Due Date	Due Time	
Module 1	2-Feb	11:15am	
Module 2	2-Mar	11:15am	
Module 3	30-Mar	11:15am	
Module 4	27-Apr	11:15am	

Grading Policy

	Project Assignments (4)	40%
Grading	Tests (4)	35%
(credit)	Homework Assignments	20%
Criteria	Attendance	5%

Grade Schema	A	93-100
	A-	90-92
	B+	87-89
	В	83-86
	B-	80-82
	С	70-79
	D	60-69
	F	Below 60

Course Policies

Course Policies	
Make-up Exams	Not allowed
Extra Credit	None
Late Work	25% reduction in grade per for any late submissions
Special Assignments	Not Applicable
	Class attendance is mandatory
	If you miss 4 unexcused classes, letter grade reduction
Class	If you miss 5+ unexcused classes, you will fail the class
Attendance	If you miss 6 days of excused or unexcused, you will fail the class
Classroom Citizenship	Respect for your classmates and professor is always necessary No cell phone usage during class. Turn off the sound and put them out of reach. Computers are allowed only for taking notes and class- related activities, not for other class activities. If you are doing other work in class, you will be asked to leave and marked absent.

COVID-19 Guidelines and Resources

The information contained in the following 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.

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

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

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor and will be posted on eLearning.