SYLLABUS: SENIOR DESIGN

COURSE & INSTRUCTOR INFORMATION

Course

Course Title, Prefix, Number, Section: Senior Design, COSC 40993, 010

Semester and Year: Spring 20XX

Number of Credits: 3

Course Component Type: Lecture

Instructor

Final Evaluative Exercise & Important Dates

STUDENT RESEARCH SYMPOSIUM: APRIL 25, 2025
FINAL PRESENTATION: MAY 1, 2025
FINAL EXAM: 8 AM – 10:30AM, MAY 9, 2025

Note for students: The syllabus is your first course reading. It provides an orientation to, overview of the flow, and expectations of the course. You should turn to the syllabus for details on assignments and course policies.

Student Resources & Policy Information

Scan QR code for resources to support you as a TCU student. Please note section on Student Access and Accommodation, Academic Conduct & Course Materials Policies, and Emergency Response & TCU Alert.

COURSE DESCRIPTION

Catalog Description

Senior computer science majors are required to demonstrate their mastery of several computer science topics and their ability to communicate the results of their efforts to

others. They are required to identify and analyze a computer science problem, develop and implement a workable solution to the problem, and then document the results of their efforts.

Prerequisites & Concurrent Enrollment

Prerequisite: COSC 40943.

Course Materials

Required Materials

None.

Learning Outcomes

Course Learning Outcomes

1) Be able to specify, design, implement, and test a complex computer software system.
2) Have gained experience in working on a significant software project in a team environment.
3) Be able to express project design and implementation solutions clearly and precisely both in writing and in public presentations.
4) Be able to develop and carry out a test plan for a software product.
5) Demonstrate the ability to learn, evaluate, and apply new techniques and technologies that are appropriate for the software project developed.
6) Be able to analyze software documents for completeness, ambiguity, and correctness.
7) Have participated in code inspections and walkthroughs.

TCU Outcomes

This course is part of the TCU Core Curriculum: Writing Emphasis (WEM). Student will write for a specific discipline, profession, or field using a writing process that emphasizes revision.

Course Requirements

Weekly Evaluations

Your grade is NOT determined solely on the artifacts produced by the team but is ALSO determined by your individual contribution AND your collaboration with team members. Tardiness and absenteeism are considered unprofessional and CANNOT be tolerated. Your team needs you to be in class, in project meetings, on time, responsive, and to be a productive team member.

There will be 14 weekly evaluations. Each one is worth 4% (2% **weekly project checkpoint** + 2% **weekly peer evaluation**) of your overall grade. Here are some detailed rules:

- Every Monday before class time, you must submit a weekly activity report (WAR) to https://projectpulse.team specifying what contribution you made to the project during the past week (Inflating time and activities reported in WAR is considered as academic dishonesty). Failure to submit WAR by that time will result in 1% overall grade reduction.
- Every Tuesday before 10 AM, you must submit weekly peer evaluations to https://projectpulse.team for your teammates on their performance during the past week. Failure to submit peer evaluations will result in a zero for your 2% weekly peer evaluation.
- Every team must meet with the instructor every week to report project progress. Before the meeting, the team is required to prepare and print a written meeting agenda for the instructor. After the meeting, the team is required to post meeting minutes to Riogrande website. Failure to provide a written agenda at the beginning of the meeting will result in 1% overall grade reduction for every member of the team.
- The team must meet with your client regularly to report progress and clarify questions. Please advise me well in advance of client meetings so I can plan to attend as many as my schedule allows.
- Each absence (lectures, weekly team meetings, presentation practice, and client meetings) causes 1% grade reduction. The team leader is responsible for collecting this data for team members and reporting the absence to https://projectpulse.team through peer evaluations' "public comment" feature.
- Requests for re-evaluation of points on weekly evaluations and projects must be made to the instructor within **one week** of receiving your grade and accompanied by a brief written description of the grading error you believe was made. After this time, grades are final.

Final Project Deliverables

A project is not complete, and a passing course grade will NOT be assigned until ALL required items are successfully completed and submitted. This includes:

1. Project Glossary Doc
2. Vision and Scope Doc
3. Use Case Specification Doc
4. Business Rules Doc
5. Software Development Plan (Release plan and Iteration plans)
6. Software Requirements Specification (SRS)
7. User Acceptance Test Cases
8. User's Manual
9. Completed Riogrande project website

Important Deadlines

- A final development review meeting needs to be scheduled for the week of March 10. Every team should demonstrate to the clients and the instructor a fully working software with all promised features implemented. This will allow both clients and the instructor ample opportunity to validate the software. Failure to do so results in losing 10% of your overall grade immediately. Then 2% penalty of your overall grade for each late day.
- Project MUST be deployed and handed over (program and documentations) by Monday, April 14. A handover document must be signed by your client and turned in. Failure to do so results in losing 10% of your overall grade immediately. Then 2% penalty of your overall grade for each late day.
- Everyone MUST contribute to the TCU Student Research Symposium poster presentation on Friday, April 25. Failure to do so results in losing 10% of your overall grade.
- The Computer Science Department's Senior Design Presentations are scheduled for Thursday evening, May 1. The Senior Design Presentations will be open to faculty, students, invited guests, industry personnel, and other interested parties. Failure to present in the final presentation will result in an F for this course.

Grading Philosophy & Policy

Late Work

Late WAR and peer evaluations are NOT accepted.

Questions on Grading

Requests for re-evaluation of points on exams, homework, weekly evaluations, and projects must be made to the instructor within one week of receiving your grade and accompanied by a brief written description of the grading error you believe was made. After this time, grades are final. Resubmission for re-evaluation subjects the entire assignment for review. This means that if an error was made in your favor, you may lose points when re-submitting.

Participation, Engagement & Attendance

Each absence (lectures, weekly team meetings, presentation practice, and client meetings) causes 1% grade reduction.

I Do Not Accept Medical Documentation

Because it is considered an infringement on student privacy for me to have access to student medical records, I cannot accept medical documentation to justify absences. If you have a legitimate reason for your absence and want to provide verification, please access the Absence Documentation Form here.

Course Assignments & Final Grade

Assignments	Percentage or Points
Weekly Project Checkpoints	28
Peer Evaluations	28
Client Evaluations	32
Project Deliverables	12
Total	100

Grading Scale(s)

Grade	Score
A	90–100
B	80–89
C	70–79
D	60–69
F	0–59

COURSE SCHEDULE

Dates	Topic
Week 1	Introduction & Syllabus
Week 2	Software Development Iteration 1
Week 3	Software Development Iteration 1 (cont.)
Week 4	Software Development Iteration 1 (cont.)
Week 5	Software Development Iteration 2
Week 6	Software Development Iteration 2 (cont.)
Week 7	Software Development Iteration 2 (cont.)
Week 8	Spring Break
Week 9	Software Development Iteration 3
Week 10	Software Development Iteration 3 (cont.)
Week 11	Software Development Iteration 3 (cont.)
Week 12	Software Development Iteration 4
Week 13	Software Development Iteration 4 (cont.)
Week 14	Software Development Iteration 4 (cont.)

Dates	Topic
Week 15	User Acceptance
Week 16	Final Project Presentations
Finals	Final Evaluative Exercise