

Syllabus for CSCI 3030 002

Course Name:

Software Engineering I

Course Prefix and Number:

CSCI 3030

Course Section Number:

002

Course Description (from catalog):

Software engineering principles, development methodologies and tools for developing large and complex software systems.

Required Course Materials for Purchase:

Engineering Software Products: An Introduction to Modern Software Engineering, by Ian Sommerville (ISBN: 9780135210642 or 9780135211168)

Student Learning Outcomes or Objectives:

This course provides practical and theoretical knowledge of software engineering. Students will learn the processes, methodologies, and tools used during the complete life cycle of professional software projects. Students are required to complete a team project over the course of the semester.

Upon completion of this course, each student will be able to:

- Understand the nature, objectives, and methods of software engineering practice
- Evaluate and choose process models for the development of software systems
- Use appropriate project scheduling and management techniques to create project management plans and documents
- Use appropriate requirements elicitation, analysis, and modeling techniques to establish and document software requirements
- Design software systems using object-oriented techniques and visual modeling tools

- Use appropriate software testing techniques to create test cases, perform tests, and create test documentation
- Use version control systems to manage software configurations and collaborate effectively on software development

Assessment of Student Performance – Grading Scale:

Grading	
A	≥ 94
A-	90-93
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	below 60

Assessment of Student Performance – Major Assignments and percentage of final grade:

Assessment	
Midterm exam (20%) and final exam (20%)	40%
Hands-On Activities (including in-class activities), Discussions, Reading Quizzes, and Homework Assignments	20%
Group Project	40%
Total	100%

Assessment of Student Performance – Attendance/participation if portion of final grade:

This is a face-to-face class, and attendance is expected. You can miss up to three classes without an excused absence. Each class missed beyond the first three will result in a deduction of 3 points from your final course grade (e.g., if you have 5 absences that are not excused, you will lose 6 points from your final

grade). This is done to emphasize the importance of attendance, especially since this gives you a chance to coordinate with your team.

Statement of Engagement with Diverse Scholarly Perspectives

This course aligns with the intent of the university to engage diverse scholarly perspectives to develop critical thinking, analysis, and debate. The inclusion of a course reading does not imply endorsement.