

CSCI 4230: Software Engineering II

Spring 2019

Instructor	Mark Hills
Scheduled Class Time	Class: Tuesday and Thursday, 2:30pm to 3:45pm Class meets in Brewster B-305 Lab: Tuesday or Thursday (assigned), 4:00pm to 6:00pm Lab meets in Bate 2006
Instructor Office	Science & Technology Building, C-110
Office Hours	Tuesday 10:00am – 11:30am Wednesday 1:00pm – 3:00pm Thursday 10:00am – 11:30am Or by appointment
Instructor Phone	252-328-9692
Instructor Email	hillsma@ecu.edu , responses within 24 hours during the week, potentially longer during holidays or weekends
Course Web Page	https://blackboard.ecu.edu/
Required Textbooks	None

Course Description and Objectives

This course provides practical training in software development using software engineering tools and principles. Students will practice using software development processes, methodologies, and commonly-used tools covering the complete life cycle of software development by building a fairly complex software system. Students are required to complete a significant team project during the course of the semester.

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

- Develop enterprise software systems using state-of-art development techniques and tools
- Evaluate and choose software processes for the development of software systems
- Plan and manage realistic software development projects
- Analyze, design, and implement software systems using object-oriented methods
- Design a test plan, develop test cases and perform tests for software systems
- Document software systems

The following applications may be used in this course:

- UML Requirements and Design Modeling: NoMagic MagicDraw
- Project and Task Management: Atlassian Jira or GitHub project boards
- Version Control/Configuration Management: Git and GitHub
- Development Environment: JetBrains IntelliJ or other language-specific IDEs
- Unit Testing: Junit or other language-specific unit testing frameworks

Topics

Topics covered in this course include:

- Software development processes and life cycles
- Planning and managing the project and project teams
- Version control/configuration management
- Requirements engineering
- Object-oriented analysis and design
- Software implementation
- Software testing

Grading

Students will be evaluated based on the following breakdown in credit for the group project:

Task	Percent
Project Management	10%
Configuration Management	10%
Requirements Elicitation, Analysis, and Specification	10%
Architecture and Design	10%
Implementation	20%
Testing	10%
Final Project Report	10%
Project Presentation	10%
Peer Evaluation of Teamwork	10%

The group project is worth 90% of the course grade. The other 10% is based on attendance and participation in both the special topic discussions and the use of CATME for team formation and peer evaluation surveys.

Course grades will be assigned based on the following 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

The final team project presentations are scheduled during the final exam period.

Attendance Policy

Attendance is required for this course: you **must** attend your assigned lab section, and you **must** attend group presentations given throughout the semester during class, even when your group is not presenting. Attendance will be taken regularly, with missed classes costing you points from your final grade. You are responsible for announcements and assignments given in class. If you miss a class, it is up to you to obtain notes and any other information that was provided in the class. Excuses that you did not know about something because you did not come to class and did not obtain the information will not be accepted. If you are having trouble keeping up with the work in this course, come to office hours or ask for help right away. If you wait until the end of class to seek help, there is most likely very little that you can do to improve your score.

Starfish

This course uses the Starfish system to provide you with information on your performance within the course. For more information, please see <http://www.ecu.edu/cs-acad/advising/upload/Starfish-Student-Getting-Started.pdf>.

Student Conduct

Smoking is not permitted in classrooms. Please turn off mobile phones in class. Laptops and tablets can be used for taking notes, but should not be used for other work (or recreational browsing, playing games, etc).

Students are expected to abide by the university's Student Honor Code. The homework that you do is a critical part of your education. Each student is expected to do his or her own individual work, and each group is expected to do their own group work. That does not mean you are not allowed to discuss your ideas with other students or groups. Working in groups can be beneficial, and I encourage you to talk through ideas with other students. But outright copying is considered plagiarism and is unacceptable. Students who copy other students' work, or who allow their work to be copied, or who copy their work from other sources, such as the Internet, will receive either no credit or negative credit for the assignment, and may be reported to the university for an academic integrity violation.

Other potential academic integrity violations are cheating, falsification, multiple submissions of the same work in different classes, and attempts at any of these violations. Please see http://www.ecu.edu/cs-studentlife/policyhub/academic_integrity.cfm for more details.

Academic integrity violations can result in a grade penalty up to and including an F for the course.

Incompletes

No incompletes will be issued in this course except for extraordinary circumstances, which generally will be situations where almost all work is complete, this work has been done at an acceptable level of quality, and it is realistic that you can pass the course once the remaining work is completed.

Retention Requirements

Academic requirements for retention have changed. Please be aware of the following new GPA requirements. Please discuss the retention requirements, entrance to major requirements, and your goals with your academic advisor.

GPA Hours at ECU (identified in Transcript in Banner Self Service) plus transferred credit hours	“Old” Retention Requirement All courses taken at ECU	New Retention Requirements Effective with Fall 2011 grades All courses taken at ECU
1-29 semester hours	1.6 GPA	1.8
30-59 semester hours	1.8 GPA	1.9
60-74 semester hours	1.9 GPA	2.0
75 or more semester hours	2.0 GPA	2.0

Weather Emergencies

In the event of a weather emergency, information about ECU can be obtained through the following sources:

ECU emergency notices <http://www.ecu.edu/alert>
ECU emergency information hotline 252-328-0062

Students with Disabilities

East Carolina University seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must be registered with the Department for Disability Support Services located in Slay 138 ((252) 737-1016 (Voice/TTY)).

For more information, please see <http://www.ecu.edu/cs-studentlife/dss/>.

Copyright on Course Materials

Course materials, including programming assignments and lecture notes, can only be publicly shared or used for commercial purposes if given permission. This is covered by ECU copyright regulations, available at <http://www.ecu.edu/prr/10/40/02>, which state the following:

7.1.3. Notes of classroom and laboratory lectures, syllabi, exercises and other course materials taken by Students shall not be deemed Student Works, may only be used for personal educational purposes, and shall not be used for commercialization by the Student generating such notes or by any third party without the express written permission of the author of such Works. Violation of University Policy may be grounds for disciplinary action pursuant with the ECU Student Conduct Process.

Caveats

Occasionally, it may be necessary to revise this syllabus due to extenuating circumstances. I reserve the right to revise this syllabus if the need arises. If I do so, I will provide you with advance notice.