

CSCI 4230: Software Engineering II

Spring 2020

Instructor	Dr. Mark Hills
Scheduled Class Time	<p>Section 001: Tuesday and Thursday, 12:30pm to 1:45pm Section 002: Tuesday and Thursday, 2:00pm to 3:15pm Class meets in Austin 302</p> <p>Lab Section 001: Monday, 5pm to 6:40pm Lab Section 002: Wednesday, 5pm to 6:40pm Lab meets in Bate 2016</p> <p>Section 001 goes to Lab Section 001 Section 002 goes to Lab Section 002</p>
Instructor Office	Science & Technology Building, C-110
Office Hours	<p>Monday 4pm to 5pm Tuesday 3:30pm to 5pm Wednesday 3:30pm to 5pm Thursday 3:30pm to 4:30pm</p> <p>Feel free to make an appointment with me if you need to meet outside of these hours. If I am not able to hold office hours at a regularly scheduled time, I will announce this on Blackboard.</p>
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 Modeling: StarUML, Visual Paradigm
- Project and Task Management: Atlassian Jira, Atlassian Confluence
- Version Control/Configuration Management: Git and GitLab
- 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

Each group will be approximately 6 students. More details about the project are available on Blackboard. The breakdown in credit for the project is as follows:

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 Feedback, Peer Evaluation of Teamwork	10%

The group project is worth 90% of the course grade. The other 10% is based on attendance, participation, 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. For Section 001, this is 11am to 1:30pm on Tuesday, May 5th. For Section 002, this is 2pm to 4:30pm on Thursday, April 30th. There is no actual final exam in this class, but attendance during the final exam period is mandatory.

Attendance Policy

Attendance is required for this course: you **must** attend your assigned lab section, and you **must** attend regular classes, even when your group is not presenting. **Not counting excused absences, you can miss at most two labs, and at most three regular class sessions on days when you are not presenting, before you start losing points. You cannot miss a class session on a day when you are scheduled to present (i.e., when you are actually one of the speakers for your team) without a university-excused absence.**

A university-excused absence is defined here: <https://deanofstudents.ecu.edu/home/university-excused-absence/>. If your absence is planned (e.g., participation in university-related activities, religious observations), you should work with your team to ensure you are not scheduled to present on the same day and that your work on the project is up to date. You should also contact me and your teammates to make sure I am/they are aware of it, even when not presenting. If you have an emergency where you cannot contact me and/or your teammates (e.g., a sudden illness), you should follow up once you are better as quickly as possible to see what you missed. Make sure you get a doctor's note if you miss class for medical reasons.

An excused absence is a bit broader: it includes university-excused absences, but also adds planned absences you have discussed with me. This includes absences for job interviews, for attending conferences related to your studies, and for family emergencies. You should endeavor to minimize conflicts with your assigned class and lab sections, but I know this isn't always possible. If you have already discussed an absence with me in advance, you can assume you have my permission, but feel free to ask if you are not sure. As with university-excused absences, keep your team in the loop.

Attendance will be taken regularly, with missed classes costing you points from your final grade. **For classes, you will lose 3 points from your final score for each class beyond the allowed 3 that you miss. For labs, you will lose 5 points from your final score for each lab beyond the allowed 2 that you miss. If you miss class and a lab on the same day, you can lose points for both. If you miss more than 6 of the labs, total (so, more than 4 beyond the allowed 2), you will get an automatic F in the course. If a class is "miss-able", I will state this explicitly (note: none of the labs are miss-able!)**

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 <https://osrr.ecu.edu/policies-procedures/> 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

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/pr/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.

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/>.

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 announce this on Blackboard.