

CSCI 4230: Software Engineering II

Spring 2024

Instructor	Mr. Alex Vilkomir
Scheduled Class Time	<p>Section 001: Monday and Wednesday, 10:00 am to 10:50 am Class meets in Austin 201</p> <p>Section 002: Monday and Wednesday, 12:00 pm to 12:50 pm Class meets in Austin 303</p> <p>Section 003: Monday and Wednesday, 1:00 pm to 1:50 pm Class meets in Austin 303</p> <p>Lab Section 001: Monday, 5 pm to 6:40 pm Lab Section 002: Wednesday, 5 pm to 6:40 pm Lab Section 003: Friday, 2 pm to 3:40 pm Lab meets in Bate 3008</p> <p>Section 001 goes to Lab Section 001 Section 002 goes to Lab Section 002 Section 003 goes to Lab Section 003</p>
Instructor Office	Science & Technology Building, C-111
Office Hours	<p>Monday, Wednesday 11:00 – 11:30 am, 2:00 pm – 3:00 pm Friday 10:00 pm – 12:30 pm</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 Canvas.</p>
Instructor Phone	252-328-9439
Instructor Email	vilkomira21@ecu.edu , responses within 24 hours during the week, potentially longer during holidays or weekends
Course Web Page	https://ecu.instructure.com/
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, TestNG 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 six students. More details about the project are available on Canvas. The group project is worth 90% of the course grade. The breakdown of this 90% 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%
Project Presentations	10%
Peer Feedback	10%

The other 10% of the course grade is based on attendance and participation.

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. Section 001 is 8 am to 10:30 Am on Monday, April 29th. Section 002 is 11 am to 1:30 pm on Tuesday, April 30th. Section 003 is 11 am to 1:30 pm on Monday, April 29th. This class has no final exam, 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 required classes, even when your group is not presenting. **Not counting excused absences, you can miss at most two labs or three required 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.** Each class missed beyond the first three will deduct 3 points from your final course grade. Each lab missed beyond the first two will deduct 2 points from your final course grade. Ten combined unexcused absences are automatically equal to F for this course.

Excused absences fall into two categories: university-excused absences and planned absences that have been approved.

A university-excused absence is defined here: https://www.ecu.edu/cs-studentaffairs/dos/excused_absences.cfm. 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 your teammates and me to ensure I am/they are aware of it, even when not presenting. I can also brief you on what we worked on in class that day. 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 and adds planned absences you have discussed with me. This includes absences for job interviews, attending conferences related to your studies, and family emergencies. It would be best if you endeavored to minimize conflicts with class, but I know this isn't always possible. If you have already discussed an

absence with me in advance, and if I've approved it, you can assume you have my permission, but feel free to ask if you are not sure. Similarly to the above, keep your team in the loop.

As is to be expected, if you are sick, do not come to class! This is an excused absence. Just contact me as soon as you are able.

In case of an outbreak, the class may be moved to an online format for up to two weeks. During this period, the above attendance policy will remain in effect. You instead will be expected to attend online, during our regular class time. If you have poor Internet access, contact me within 48 hours of the announcement of the online move to work out a plan for attendance. You will also want to coordinate with your teams in that case.

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>.

Late To Class / Leaving Early

If miss more than 20 minutes of the class period (arriving late/leaving early), you will be counted as absent for the entire class period.

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.

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.

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/>.

Writing Intensive (WI)

CSCI 4230 is a writing intensive course in the Writing Across the Curriculum Program at East Carolina University. This course will focus on the development of writing skills. Upon completion of the course students will:

1. Use writing to investigate complex, relevant topics and address significant questions through engagement with and effective use of credible sources.
2. Produce writing that reflects an awareness of context, purpose, and audience, particularly within the written genres (including genres that integrate writing with visuals, audio, or other multimodal components) of their major disciplines and/or career fields.

3. Demonstrate that they understand writing as a process that can be made more effective through drafting revision.
4. Proofread and edit their own writing, avoiding grammatical and mechanical errors.
5. Assess and explain the major choices that they make in their writing.

This course contributes to the four-course WI requirement for students at ECU. Additional information is available at the following site: <https://writing.ecu.edu/>.

University Writing Portfolio

Students in all writing intensive courses are required to submit at least one completed written project to their University Writing Portfolio. In this course, students will submit assignments using the Portfolium tool. The university uses these writing samples to assess the writing program and to make improvements where necessary. To report problems with Portfolium, contact ITCS: <https://go.ecu.edu/Portfolium>.

By default, assignments that you submit to your University Writing Portfolio become part of your personal Portfolium website (<https://ecu.portfolium.com>), which you may use or not as you please. Be aware that you are in control of the privacy settings of your Portfolium site and should review the settings to ensure your privacy settings are set to your preference. Making items on your personal Portfolium site public or private does not impact your grade in your writing intensive courses. Your Portfolium account remains yours after you leave ECU.

Caveats

Occasionally, it may be necessary to revise this syllabus due to extenuating circumstances. I reserve the right to modify this syllabus if the need arises. If I do so, I will announce this on Canvas.

Communication Excellence:

Do you wish you felt more confident when communicating with your professors and supervisors? Do you dread getting up to speak in front of your peers? Would you like to be a more engaging speaker when giving class presentations? Do your professional communication skills need help? The Center for Communication Excellence, located in 205 Joyner East, is available to you as a FREE service. Face to face and virtual appointments are available.

Website: <https://communication.ecu.edu/cce/>

For more information and hours of operation, call 252.328.2790 or email commcenter@ecu.edu