CSCI 4230: Software Engineering II
Spring 2024

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Mr. Alex Vilkomir</th>
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</table>
| Scheduled Class Time| Section 001: Monday and Wednesday, 10:00 am to 10:50 am  
Class meets in Austin 201  
Section 002: Monday and Wednesday, 12:00 pm to 12:50 pm  
Class meets in Austin 303  
Section 003: Monday and Wednesday, 1:00 pm to 1:50 pm  
Class meets in Austin 303  
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  
Section 001 goes to Lab Section 001  
Section 002 goes to Lab Section 002  
Section 003 goes to Lab Section 003 |
| Instructor Office   | Science & Technology Building, C-111 |
| Office Hours        | Monday, Wednesday 11:00 – 11:30 am, 2:00 pm – 3:00 pm  
Friday 10:00 pm – 12:30 pm  
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. |
| 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:

<table>
<thead>
<tr>
<th>Task</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Project Management</td>
<td>10%</td>
</tr>
<tr>
<td>Configuration Management</td>
<td>10%</td>
</tr>
<tr>
<td>Requirements Elicitation, Analysis, and Specification</td>
<td>10%</td>
</tr>
<tr>
<td>Architecture and Design</td>
<td>10%</td>
</tr>
<tr>
<td>Implementation</td>
<td>20%</td>
</tr>
<tr>
<td>Testing</td>
<td>10%</td>
</tr>
<tr>
<td>Project Presentations</td>
<td>10%</td>
</tr>
<tr>
<td>Peer Feedback</td>
<td>10%</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Score</th>
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<tbody>
<tr>
<td>A</td>
<td>≥ 94</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
</tr>
<tr>
<td>F</td>
<td>below 60</td>
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</tbody>
</table>

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](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 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 though 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