
CS325 – Software Engineering – Spring-24

MW: 03:00PM - 04:15PM | PH 1402

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| O.H. - EB 2062, MW 10:30AM-11:30AM, by appointment |

Course description and objectives: The purpose of the course is to study ways to improve your coding with python, and to learn ways to do coding in groups. Topics covered include Software Development Processes, Code repositories, UML Diagrams, Testing, Design Patterns, and Working as a Software Engineer

Prerequisites: CS150, CS234

Course Website: Moodle <http://classes.cs.siue.edu>

TA: Nicole Morgan, nimorga@siue.edu, and Tavleen kaur, ntavlee@siue.edu, O.H: T 03:30 - 04:30, EB 1018(tentative). Please drop an email, if you want to have an in person meeting.

Grading:

A >= 900, B >=800, C >= 700, D >=600, F <= 599

Students should be aware that the week begins on Monday and ends on Sunday.

Grade breakdown:

[100] Quizzes

Almost every week

[250] Assignments

[100] Mid-term

Written exam

[100] Final-exam

Written exam

[450] Projects

It will be a one semester long continuous project with different expectations in each project. Each project will be built on top of the previous project

Class and Assignments: The course delivery mode will be face to face. The only requirement is that each assessment is completed by its due date that will be announced in Moodle.

Students should monitor their email daily for any announcements that are made. **Moodle announcement will be the primary mode of communication** and the instructor will definitely respond to any received email within 24 hours, but usually as soon as it's received. Students should check the spam folder for misplaced emails from the instructor. Generally, assessment can be submitted up to 2 days late for a 20% penalty, After that no late submissions will be accepted for any reason. It is the student's responsibility to be prepared for the unexpected (power loss, no internet, no backup etc). Always double check your submission. It is highly suggested you add reminders for all assessed work due dates.

Make-up policy: In order to be considered for a make-up, a student must be proactive and not reactive. Students should inform the instructor of any scheduled absence or difficulty in meeting a deadline, in advance (proactive) not after the fact (reactive). On special unforeseen occasions such as a medical emergency, family hardship, natural disaster or anything that is out of a student's control, the instructor should be notified as

soon as possible and proper documentation should substantiate the absence. The instructor will have the final say in all such decisions regarding make-ups and assessed penalties if applicable.

Course Material: Do not post any provided material for this course on any publicly available location, such as social media or shared cloud drives. Materials provided for the course that are provided by the instructor, other SIUE instructors and the textbook publisher may not be reproduced and/or posted to any electronic repository that is accessible to anyone except yourself. That is, no material for this course may be shared or posted by you or linked by you to any outlet such as (but not limited to) social media sites, web pages or public folders on cloud storage systems (such as Dropbox, Google Drive or OneDrive). All materials (whether behind secure sites or publicly available) are for your use only in this course and the creators do not grant permission for any other use. The recording, as well as replicating or sharing of any course content and/or course materials without the express permission of the instructor of record, is not permitted, and may be considered a violation of the University's Student Conduct Code (3C1), linked here: <https://www.siu.edu/policies/3c1.shtml>.

Course and University Policies

Academic Integrity: For school policies and procedures, you may refer here: <http://www.siu.edu/policies/3c2.shtml>. In this course we have group projects and *encourage* students to work together. So what constitutes academic misconduct? It is **not** considered academic misconduct if you:.

- Get help from other professors, tutors, etc. on the assessment *provided* it is clear that you are the author of your own answers, and you understand what you've written down.

An instance of academic dishonesty, or cheating, will result in receiving an F in the class. Some things that count as cheating are:

1. Discussing quiz questions with a friend while you take a quiz.
2. Telling a friend the questions that were on the quiz before they take it.
3. Copying answers from an online tutor or homework website.
4. Obtaining a copy of a quiz before taking the quiz.
5. Having someone else take a quiz for you.
6. Taking a quiz for someone else.
7. Working in pairs/groups where only one person does all the work.
8. Copying parts of your final project from a website.
9. Copying code or results or reports from a friend or website.
10. Letting a friend copy your code or results or report.
11. Paying someone to write your code or report for you.
12. Lying to an instructor about how much work you put into a project.
13. Lying to an instructor to obtain more time to work on a project.
14. Helping others cheat.

The above lists are intended as examples and are not exhaustive. If in doubt, please ask.

Participation: It is vitally important that our classroom environment promotes the respectful exchange of ideas. Your success in this course will depend on your communication, consistent engagement, and active participation in all course activities. Success in this course requires that you adhere to the deadlines given as you complete assignments, discussions, and other course activities. Participation in discussions, presentations, team meetings with the instructor, and other class events is very important and is not optional.

Diversity and Inclusion: SIUE is committed to respecting everyone's dignity at all times. In order to learn, exchange ideas, and support one another, our virtual and physical classrooms must be places where students and teachers feel safe and supported. Systems of oppression permeate our institutions and our classrooms. All students and faculty have the responsibility to co-create a classroom that affirms inclusion, equity, and social justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other social pathologies are not tolerated. Violations of this policy will be enforced in line with the SIUE Student Conduct Code.

The Hub <https://www.siue.edu/csdi> is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact Ms. Jamie Ball, Director in the Office of Equal Opportunity, Access and Title IX Coordination at (618) 650-2333 or jball@siue.edu. There is also an online form for reporting bias incidents at https://cm.maxient.com/reportingform.php?SIUEdwardsville&layout_id=10.

Pregnancy and Newly Parenting Policy: This policy and procedure are established to ensure the protection and equal treatment of pregnant students, students with pregnancy-related medical conditions including as a result of the termination of pregnancy, and students who become new parents including parents adopting or fostering to adopt for the first 12 weeks a child is in the home, in accordance with Federal and State guidelines and regulations. "New Parents" refers to a parent who has recently welcomed a newborn or adopted a child or is fostering to adopt a child and needs support to mitigate the disruption in academic progress within the first 12 weeks of parenting or a parent that needs support due to medical necessity attributed to pregnancy or delivery of a child; care of newborn; or lactation within the first year of child's life or legal adoption/fostering. Visit [Policies & Procedures - Student Rights and Conduct - Newly Parenting Policy - 3C15](#) to view the full policy and learn how to request accommodations through the Office of Equal Opportunity, Access, and Title IX Coordination (EOA).

Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, or communicate with other students, to adjust as needed if assignments or due dates change.

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Course Schedule

| Wk | Date | Topic | Assessment |
|-----------|---|---|---|
| 1 | 01/08 | Introduction To Software Engineering(SE). | Quiz-1 |
| 2 | 01/15 | Introduction to Object Oriented Python | Quiz-2 |
| 3 | 01/22 | Introduction to Object Oriented Python | Quiz-3 |
| 4 | 01/29 | Introduction to Git and environments management | Quiz-4, Assignment-1 |
| 5 | 02/05 | Lifecycle and Requirements | Quiz-5, project-1 |
| 6 | 02/12 | Software Design | Quiz-6 |
| 7 | 02/19 | Software design-UML | Quiz-7, Project-2 |
| 8 | 02/26 | Midterm and Q-A with a SE | Midterm |
| 9 | 03/04 | Break | |
| 10 | 03/11 | Enterprise SE tools-1 | Project-3 |
| 11 | 03/18 | Enterprise SE tools-2 | Assignment-2 |
| 12 | 03/25 | Programming and User Experience | Quiz-8 |
| 13 | 04/01 | Different types of testing with examples in python | Quiz-9, Project-4 |
| 14 | 04/08 | Different types of testing with examples in python and project deployment | Quiz-10, Assignment-3 |
| 15 | 04/15 | Quality metrics and maintenance | |
| 16 | 04/22 | Final Exam and Project-5 presentation* | Final exam, Finalize and deliver project-5: TBD |
| 17 | Finals week - This course has no exam this week | | |

*** Project Presentation:** The presentation will be one on one, code and project understanding will be reviewed during this process.