SE201: Introduction to Software Engineering and Development

Course Syllabus

1. General Information

Instructor: Dr. Sean Grimes
Office Hours:
              Mondays 1:45pm – 2:45pm (Room 1161)
              Mondays 6:30pm – 7:30pm (Zoom)
              By appointment
Zoom Link: --

Teaching Assistant: --

See the "Discord Info for CCI" on Blackboard.
The category for this course is SE201-XXXX

2. Student Learning Information

2.1 Course Description

This course introduces many software engineering fundamentals that are integral to success in later courses and in the industry. Please see official course description for more information.

2.2 Prerequisites:

- CS 172

2.3. Statement of Expected Learning

The course objectives are to:
- Code in Java
- Create test cases
- Test Driven Development
- Software Engineering principles and design
- Create UML class diagrams
- Develop software in version-controlled environment (git)
- Understand process models (Waterfall vs Agile)
- Use continuous integration tools
- Use static analysis tools
- Know how to debug in Java
- Understand requirements gathering and writing process

2.4 Tools

This course uses IntelliJ and Java 17.

3. Course Materials

Required Readings
- "Test-Driven Development by Example" by Kent Beck, available free in Drexel digital library

4. Assignments and Labs

Warning: All assignments in this course are consecutive. Missing even one will be extremely detrimental to the following assignments. Therefore, assignments are weighted heavily in the grading scale for this course.

Assignment submission requirements:
    This course requires Java 17.
- All submissions must be made through Blackboard Learn. You are allowed multiple submissions. We will grade the latest submission you sent before the due date. In other words, **if you make a resubmission after the due date, that submission will not be graded.**
- All coding submissions need to include the full project directory, any associated resources (README, other notes) inside a zip file.

Late policy:
- Assignments and labs submitted up to 1 week late will receive a 10% penalty.
- Assignments and labs submitted 1 to 2 weeks late will receive a 25% penalty.
- **Assignments and labs will not be accepted for credit beyond 2 weeks.**
- Assignments will not be accepted for credit after the start of finals week.
- Extensions will be granted on a case-by-case basis; extensions must be granted before the assignment or lab due date, for a valid reason, and agreed to by the professor. Extension requests are not guaranteed to be honored.

5. Attendance Policy
- Attendance is required and tracked, and will be a part of your grade (details in Grading section).
- Up to 3 absences will be allowed without documentation, documentation for more than 3 absences *will be* required.
- Please don't come to class sick! If you are sick, particularly on a lab day, contact the professor to determine how to make up the lab.
- It is your responsibility to contact the professor to determine how to make up any missed in-class activities. They must be made up; they will not be excused.

6. Grading

Grading components:
- Assignments, Labs, and Quizzes 50%
- Attendance 10%
- Midterm Exam 10%
- Final Exam 10%
- Final Project 20%

There will be no late entries accepted for the Course Project.

Validating your Gitlab account: GitLab requires new users to provide a valid credit or debit card number to use CI jobs hosted at GitLab. Hence, you will need a credit/debit card information (required) to validate your account for this course. **There will be no charges to your account, Gitlab is completely free.** This information is required only to validate your credentials. Therefore, you can use any valid card you have access to. You can read more here: [How to prevent crypto mining abuse on GitLab.com SaaS | GitLab](). As an alternate option (i.e., to avoid sharing credit card information), you can try emailing Gitlab (https://about.gitlab.com/sales/) and working with them directly. We suggest you use your Drexel email and request to use the pipeline to complete SE 201. However, the TAs or instructors would not be able to help you facilitate this option/communication.
Failure to validate your Gitlab account will result in a failing grade in the course.

The instructor reserves the right to make modest adjustments (5% or 10% for a category) in the weighting used. Good quality in-class participation (being prepared to answer questions posed by the instructor during the class) will be considered when determining final grades for the course.
The following scale will be used to convert points to letter grades:

Points	Grade
Exceptional	A+
93-100	A
90-92.99	A-
87-89.99	B+
83-86.99	B
80-82.99	B-
77-79.99	C+
73-76.99	C
70-72.99	C-
67-69.99	D+
60-66.99	D
0-59.99	F

Note that the instructor may revise this conversion if/when necessary.

7. Course Schedule

[This schedule is tentative and may change during the course.]
Week by week:
1. Java Review (Sept. 23 – Sept. 27)

2.TDD + Pair Programming (XP) (Sept. 30 – Oct. 4)

3. Requirements + SE Process + Project reveal (Oct. 7 – Oct. 11)

4. In-class demonstration / exercise (Oct. 14 – Oct. 18)

5. Continuous Integration / Static Analysis / Debugging (Oct. 21 – Oct. 25)

6. Continuation of previous week, (potential) midterm review period / **Midterm Exam** (Oct. 28 – Nov. 01)

7. Mutation Testing & UML (Nov. 04 – Nov. 08)

8. Agile & SE Principles & Clean Code / **Full Project Reveal** (Nov. 11 – Nov. 15)

9. TBD (Nov. 18 – Nov. 22)

10. Thanksgiving Week (Nov. 25 – Nov. 29)

11. Exam & Project Help (Dec. 02 – Dec. 06)

12. Final Exam (Dec. 09 – Dec. 13)

8. Academic Policies

Don't cheat or else.
Sharing code is obviously cheating. Sharing ideas, test cases, strategies, or solutions is less obvious but still *cheating*.
Plagiarism is… guess what… cheating!
Use of ChatGPT or other generative 'AI', or any other forms of AI / code generators to produce in part, or in full, any of your submissions will be considered a violation of the academic honesty policy.

This course follows university, college, and department policies, including but not limited to:
- Student Life Honesty Policy from Judicial Affairs: https://drexel.edu/studentlife/community-standards/code-of-conduct/academic-integrity-policy
- Course Drop Policy: https://drexel.edu/provost/policies-calendars/policies/course-add-drop/
- Office of Disability Resources: https://drexel.edu/disability-resources/support-accommodations/student-family-resources
- Official Final Exam Schedule: http://www.drexel.edu/registrar/scheduling/exams/
- Course Withdrawal Policy: https://drexel.edu/provost/policies-calendars/policies/course-coop-withdrawal/
- Absence from class for University events: https://drexel.edu/provost/policies-calendars/policies/absence