

## Course Overview

CS 349: Software Engineering  
Instructor: Ashwin Lall

Fall 2024  
Last modified: 2024-08-26

## Course Details

- Meeting times and place: MWF 11:30-12:20am, Ebaugh 002
- Office Hours: M 1:30-2:30pm, W 2-3pm, F 10-11am, by appointment, or if I look available.
- Textbook: *Software Engineering, 10th edition* (by Ian Sommerville).
- Course management: All materials will be on Canvas.

## Course Description

Students will apply their theoretic background, together with current research ideas to solve real problems. They will study principles of requirements analysis, methods of designing solutions to problems, and testing techniques, with special emphasis on documentation. The department strongly recommends that students enrolling in this course have earned a grade of C or higher in Data Structures (CS 271).

## Course Goals

There are three goals for this course:

1. to understand the terminology and principles of software engineering,
2. to apply the software engineering principles in practice, and
3. to build software with a client in mind.

## Grading

Grades will be based on the following weighting scheme:

Reading notes	10%
Homework assignments	10%
In-class exams	20%
Project	60%

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
93.33+	90+	86.67+	83.33+	80+	76.67+	73.33+	70+	66.67+	63.33+	60+	< 60

**Reading notes:** When you do the reading for the course from our textbook, you should make notes **in your own words** for yourself that you can use to make sure you are understanding all the detail of what you are reading. You can also use these notes during the in-class exams. I will collect your notes for the reading at the end of the class period. I will give the following feedback for each set of reading notes:

- × Notes not submitted
- ✓- Notes submitted with not enough detail
- ✓ Notes submitted with some detail
- ✓+ Notes submitted with excellent detail

**Homework:** You will have a variety of homework assignments throughout the semester. These projects will allow you to more deeply understand software engineering principles.

**Exams:** There will be two in-class exams on the topics from the book and class. The purpose of these is to make sure that you have solidified your understanding of the software engineering principles learned from the readings.

**Project:** The majority of your grade will come from a semester-long project that you will work on in a group. The goals of this project are for you to apply the software engineering principles you will be learning in class and also learning to work with a client in mind. More details on this project can be found on Canvas.

## Advice from CS faculty

1. **Embrace intellectual independence** Embrace the departmental mission and the core learning goals of each course as primary objectives. Focus actions and intentions to learn the material and cultivate a problem-solving mindset, not just to get assignments completed.
2. **Be respectful** Strive for respectful, meaningful, and productive relationships between and across roles, genders, nationalities, backgrounds, and identities. Proactively contribute towards a learning environment that nurtures and respects all people.
3. **Act with integrity** Act with integrity and honesty when representing one's self and one's capabilities. Take pride in discovering the best version of one's self.
4. **Practice responsible workplace behaviors** Adopt and practice professional behavior. Strive to develop productive work habits.
5. **Grow through failure** Be courageous with experimentation and seek out opportunities outside one's comfort zone. Recognize that failure is an important part of the learning process. We grow as we encounter and strive to overcome obstacles.

## **Academic Integrity**

Proposed and developed by Denison students, passed unanimously by DCGA and Denison's faculty, the Code of Academic Integrity requires that instructors notify the Associate Provost of cases of academic dishonesty. Cases are typically heard by the Academic Integrity Board which determines whether a violation has occurred, and, if so, its severity and the sanctions. In some circumstances the case may be handled through an Administrative Resolution Procedure. Further, the code makes students responsible for promoting a culture of integrity on campus and acting in instances in which integrity is violated. Academic honesty, the cornerstone of teaching and learning, lays the foundation for lifelong integrity.

Academic dishonesty is intellectual theft. It includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for evaluation. This standard applies to all work ranging from daily homework assignments to major exams. Students must clearly cite any sources consulted—not only for quoted phrases but also for ideas and information that are not common knowledge. Neither ignorance nor carelessness is an acceptable defense in cases of plagiarism. It is the student's responsibility to follow the appropriate format for citations. Students should ask their instructors for assistance in determining what sorts of materials and assistance are appropriate for assignments and for guidance in citing such materials clearly.

## **Attendance Policy**

A hallmark of a Denison education is the small, interactive, and participatory classroom situated within a residential community. Therefore, it is essential that students be present on campus and attend the classes in which they are enrolled. Attendance policies are designed to promote the success and well-being of the individual students as well as the community of learners in each class and co-curricular undertaking. For oneself and one's peers, attendance and presence on campus are vital to the Denison education.

You should be in class every day and inform the instructor prior to class if you cannot make it for any reason. Reading notes and other in-class assignments will only be accepted if you attend class that day.

## **Disability Accommodation**

Students with a documented disability should complete a Semester Request for Accommodations through their My Accommodations app on MyDenison. It is the student's responsibility to contact me privately as soon as possible to discuss specific needs related to your learning in the classroom and studying. I rely on the Academic Resource Center (ARC) located in 020 Higley Hall, to verify the need for reasonable accommodation based on the documentation on file in that office. Reasonable accommodation cannot be applied retroactively and therefore ideally should be enacted early in the semester as they are not automatically carried forward from a previous term and must be requested every semester.

Logistic arrangements for testing-related accommodations should be made at least a week in advance of an evaluation and follow the Exam Accommodation Policy.

## **Appropriate Use of Course Materials**

As an institution which strives to inspire and educate our students to become discerning moral agents and active citizens of a democratic society, we are committed to complying with all laws regarding copyright throughout the University. This syllabus and all course materials used in this course may be copyrighted and accordingly will be governed by the provisions of the U.S. copyright law (for an overview see <https://copyright.gov/circs/circ01.pdf> and for fair use guidelines see <https://copyright.gov/fair-use/>). In particular, posting any course materials on commercial sites or creating a bank of materials for distribution to other students may be considered a violation of the University's Code of Academic Integrity as well as a breach of copyright law. If you have any questions about these guidelines, please speak with your instructor.

## **Reporting Sexual Assault**

Essays, journals, and other coursework submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees are required by University policy to report allegations of discrimination based on sex, gender, gender identity, gender expression, sexual orientation, or pregnancy to the Title IX Coordinator. This includes reporting all incidents of sexual misconduct, sexual assault, and suspected abuse/neglect of a minor. Further, employees are to report these incidents that occur on campus and/or that involve students at Denison University whenever the employee becomes aware of a possible incident in the course of their employment, including via coursework or advising conversations. There are others on campus to whom you may speak in confidence, including clergy and medical staff and counselors at the Wellness Center. More information on Title IX and the University's Policy prohibiting sex discrimination, including sexual harassment, sexual misconduct, stalking and retaliation, including support resources, how to report, and prevention and education efforts, can be found at: <https://denison.edu/campus/title-ix>.