CSE 542 – Software Engineering Concepts

Instructor
Prof. Matthew Hertz
Davis 352
mhertz@buffalo.edu
645-4736

Office Hours
Monday 10AM – 11AM in Davis 352; by appointment; or whenever I am in my office

Readings
There is no textbook for this course.

There are links to online articles and videos that are associated with each content lecture. Reading the articles and watching the videos is STRONGLY encouraged and not doing this is not an acceptable excuse for doing poorly on an assignment. The articles and videos greatly improve students’ experiences by reinforcing the concepts they are learning and showing how these activities are carried out in industry. These links are found on the course schedule page at:
http://www.cse.buffalo.edu/~mhertz/courses/cse542/lecture.html

Description
This course introduces the terminology and concepts of software engineering. The course begins by discussing how software engineering evolved and then introduces concepts needed for well-engineered software, the software process, and the management process model. Additional topics include software requirements definition, software design, verification and validation, and software management. To help students make these concepts more manageable, students will work in teams which leads a project flow through the entire lifecycle.

Course Materials
A series of webpages, including the classroom schedule and syllabus; project description and grading rubrics; links to suggested readings; and links to helpful resources have been created for this class. These webpages can be found at:
http://www.cse.buffalo.edu/~mhertz/courses/cse542

Additionally, this course will be using Piazza to manage course announcements, communication within project teams, and forums in which students can ask and answer questions. Students will be signed up for the class at the end of the drop-add period. The class site is at:
http://piazza.com/buffalo/spring2020/cse542/home

Special Considerations
If the Accessibility Resources office has determined that you are eligible for class accommodations, such as recruiting notetakers, readers, or extended time on assignments, you must provide the course instructor with written documentation before any accommodation can be provided.
Student Learning Outcomes


Grade Components

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<td>Quizzes</td>
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<td>Attendance</td>
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<td>Semester Project</td>
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Quizzes – There will be group quizzes at the end of most Wednesday lectures. The content for each quiz will be announced beforehand in class and on the Piazza site. Quizzes will be completed in the last 15 minutes of lectures and each student will need to submit their answer from the same computer to receive credit.

Attendance – Starting with the 4th week of the term, students will need to submit an attendance form at the start of Wednesday and Friday lectures. All team members will need to use the same device to submit the attendance form and the form will only be available for the first 13 minutes. Students need to develop plans that ensure they make it to class on time.

Semester Project – For each phase of the project, the specifications, grading rubrics, and deadlines will be posted on the relevant section of the course website:
https://cse.buffalo.edu/~mhertz/courses/cse542/project.html
Every phase of the semester project is performed in your instructor-assigned group and the team's submission will receive a single score. That team score is then used to calculate each individual student's grade. These individual grades are calculated by multiplying the team submission's score, the number of students in the group, and the mean percentage of points a student received on the peer- and self-evaluations submitted for that phase.

Overall Grades

Students grades in CSE542 will use the following translations. The instructor reserves the right to revise the levels downward, but this will only occur if it is needed to maintain consistency across semesters.

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The academic degrees and the research findings produced by our Department are worth no more than the integrity of the process by which they are gained. If we do not maintain reliably high standards of ethics and integrity in our work and our relationships, we have nothing of value to offer one another or to offer the larger community outside this Department, whether potential employers or fellow scholars.

For this reason, the principles of Academic Integrity have priority over every other consideration in every aspect of our departmental life, and we will defend these principles vigorously. It is essential that every student be fully aware of these principles, what the procedures are by which possible violations are investigated and adjudicated, and what the punishments for these violations are. Wherever they are suspected, potential violations will be investigated and determinations of fact sought. In short, breaches of Academic Integrity will not be tolerated.

**Departmental Statement on Academic Integrity in Coding Assignments and Projects**

The following statement further describes the specific application of these general principles to a common context in the CSE Department environment, the production of source code for project and homework assignments. It should be thoroughly understood before undertaking any cooperative activities or using any other sources in such contexts.

All academic work must be your own. Plagiarism, defined as copying or receiving materials from a source or sources and submitting this material as one's own without acknowledging the particular debts to the source (quotations, paraphrases, basic ideas), or otherwise representing the work of another as one's own, is never allowed. Collaboration, usually evidenced by unjustifiable similarity, is never permitted in individual assignments. Any submitted academic work may be subject to screening by software programs designed to detect evidence of plagiarism or collaboration.

It is your responsibility to maintain the security of your computer accounts and your written work. Do not share passwords with anyone, nor write your password down where it may be seen by others. Do not change permissions to allow others to read your course directories and files. Do not walk away from a workstation without logging out. These are your responsibilities. In groups that collaborate inappropriately, it may be impossible to determine who has offered work to others in the group, who has received work, and who may have inadvertently made their work available to the others by failure to maintain adequate personal security. In such cases, all will be held equally liable.

These policies and interpretations may be augmented by individual instructors for their courses. Always check the handouts and web pages of your course and section for additional guidelines.

**Departmental Policy on Violations of Academic Integrity**

The CSE Department has a zero-tolerance policy for AI violation.

All AI violations will be reported to the department, school, and university, and recorded.

Even a 1st offense will receive "F" for the course, except where the instructor deems it appropriate to reduce the penalty. Subsequent violations of AI, in any form and in any other course, will automatically result in an "F" grade, with no exceptions.