



SWE415

Interdisciplinary Development

Section 01: TTh, 11a - 12:50p @ MCT162

Dr. Chen Huo

chuo@engr.ship.edu

Office Location: MCT150

Office Hours: <https://web.engr.ship.edu/~chuo/>

Zoom meetings by appointments

The content of this schedule may change during the semester.

Prerequisite(s): C or better in SWE300 or CSC471

Credit Hours: 4

Text(s):

1. *Extreme Programming Explained – Embrace Change* by Kent Beck, 2nd Edition, ISBN-13: 978-0321278654, Required
2. *Head First – Software Development*, 1st Edition, ISBN-13: 978-0596527358, Optional

Websites and Tools:

1. D2L: Course materials, grades
2. CATME: Peer Evaluation. (I'll upload the teams once the projects start)
3. Time Sheet: <https://docs.google.com/spreadsheets/d/1hEkMf7jX6pUWz0gIJCF-bGkJUW7oT4xt-mg0tqyedit?usp=sharing>
4. Personal Log: A Google Doc to be created by you, shared it with chuo@engr.ship.edu
5. Discord Channel: Class/Team discussions. The class channel is already there. The specific project sub-channels will be added when the teams are formed.

Course Grade

Your grade has two major components: a Quality grade and a Professionalism grade. The two portions of your grade are multiplied together to determine your final grade in the course. For example, if you got 90% for quality grade and 85% for the professionalism grade, your final grade will be $0.9 * 0.85 = 76.5\%$.

Quality Grade

Project	80%
Status Meeting	10%
Personal Log	10%
Participation	10%
Project Quality	50%
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Exam	20%
Extra Credits	0 – 5%

Professionalism Grade

Your professionalism grade is the grade you receive for your ability to perform in this course as you will be expected to perform in the workplace. The goal of this part of the grade is to help you understand how an employer forms an opinion of you. When you are hired, they have high hopes for you and respect your professionalism. Each time you disappoint your manager, his/her opinion of your professionalism goes down. The details of the professionalism grades can be found in the next section.

Letter Grade Distribution

≥ 93.00	A	70.00 - 76.99	C
90.00 - 92.99	A-	60.00 - 69.99	D
87.00 - 89.99	B+	≤ 59.99	F
83.00 - 86.99	B		
80.00 - 82.99	B-		
77.00 - 79.99	C+		

Professionalism Grades

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- Arriving to class on time prepared to participate
- Attending all classes
- Participating fully and respectfully in class discussions, offering constructive critiques on your classmates' work
- Responding graciously to constructive criticism
- Completing journal and time sheet entries on time
- Attending all required meetings with your team prepared

- Communicating fully about your progress with your team and technical lead (instructor)
- Communicating promptly with the course instructor and your team about any illnesses, emergencies, or family obligations you may have
- Providing documentation for any of the above listed reasons for missing class or falling behind on your schedule.

Like your employer's opinion, our professionalism grade starts at 100% and can only go down. There are no opportunities for you to gain back points once they are lost in this portion of your grade. If your professionalism grade drops below 60%, it will be impossible for you to pass this course. Do not let this happen. Here are some examples of how unprofessional behavior will affect your professionalism grade:

- Unexcused Lateness: -2 pts (late to class, late to a meeting)
- Not following specific instructions about journals or the time sheet: -2 pts
- Excused Late/absence: -1 pt (after the first 3 excused absences)
- Incomplete submission: -1 to -4 pts (depending on how much is missing)
- Unexcused missed deadline: -1 pt for each day late up to a maximum of five. After that point, you cannot submit that deliverable
- Unexcused missed class or team meeting: -5 pts
- Late or missing journal or time sheet entries: -2 pts
- Misc. transgressions: -1 to -10 pts (being a jackass during another student's critique, for example) at instructor's discretion

Your manager's opinion of your work degrades as his respect for your professionalism degrades. Therefore, your grade in this class is the product of the grade for the quality of your deliverables and your professionalism grade.

If your overall grade drops below 60%, you will receive a grade of 'F' and be required to retake the course next year in order to graduate.

Class Activities

Readings

Additional readings will be required. They will be posted on D2L. They are considered at least as important as reading the textbook.

Projects

You will work on a real project for an external customer as part of a team for the purpose of practicing agile development techniques and philosophies. Your grade will depend on the extent to which you follow those practices.

Exam

There will be one “final” exam in the fourth week of the semester. Its purpose is to make sure that you understand the project we are working on and the specific implementation of XP that we will use for the rest of the semester. The exam will be on D2L, individual, and open-book.

Personal Log

You are required to keep a journal of your thoughts about this class. This serves two purposes. First, and foremost, software engineers think about how things are going and how things can go better. This journal is the beginning of helping you learn to think like that. Second, much of what happens in this class is part of a project and your journals give me feedback to help me make sure this experience is a valuable one. So, EVERY TIME you do something for this class (read, work on the project, come to class, etc.) you must make an entry in that journal.

I will watch these journals regularly to make sure that I am getting the feedback you give, but the goal is for you to think about what is going on around you and how you can best be a productive team member. The journal’s purpose is NOT to report on what you accomplished (we have other means of doing that) and I will NOT use it to assess how much work you are doing in the class. I expect to see thoughtful analysis of your experiences. Your grade for the journal will depend on the thoughtfulness (not length!!!) of your entries.

This journal MUST be a google doc named SWE415[YourLastName] (for example, mine would be named SWE415Huo) that you share with `chuo@engr.ship.edu` so that I can comment. Each entry must be dated, state what you did for the class and then contain your thoughts about that activity. The entries MUST be sorted most-recent first.

Time Reporting

All engineering companies will ask you to make status reports on how you have spent your time. We will track the time you spend in the tool that we use for tracking the projects. Accuracy is important and errors in either direction (reporting hours you didn’t work or not reporting hours you did work) are academic dishonesty.

CATME

While there are technical goals for this course, a significant part of it is learning to work on a team. We will use CATME to give everyone anonymous feedback so that you begin to see how others perceive you.

Participation

You shall attend in the stand-ups, retrospectives, and other XP activities in the instructed way.

Status Meetings

You are required to schedule four status meetings with me throughout the semester. The goal of those is to talk about how the semester is going and strategies for how you could leverage this class to learn as much as possible. We will go over your journals, your CATME feedback and your tasks to try to get an overall perspective of how you are doing. Depending on the number of students and how a team uses class time, your status meeting may happen in a different week than others. I’ll inform you when your meetings will be.

Title IX

<https://www.ship.edu/academics/colleges/engineering/title-ix/>

Academic Honesty Policy Summary

Those students found violating Shippensburg's academic dishonesty policy ¹ will be dealt with on a case by case basis. Minimal punishment should it be a first offense is a zero for the assignment and signing a form admitting to the offense ². Second offenses are handled directly by the office for the Dean of Students. See additional information about academic Dishonesty within the School of Engineering³.

¹https://www.ship.edu/life/dean-students/student-conduct/academic_policies/

²<https://www.ship.edu/globalassets/provost/academic-dishonesty-form.pdf>

³https://web.engr.ship.edu/media/2012_AcademicDishonestyPolicy.pdf

Tentative Course Outline

The weekly coverage might change as it depends on the progress of the class. The students will be advised when to read the corresponding material.

Date	Goal	Reading	Notes
1/17	Intro		
1/19	What is a process?	Royce Paper	
1/24	SE design	Reeves Paper	
1/26	Intro to XP	XP Book Chapters 1 - 5	
1/31	XP Details	XP Book Chapters 6 - 12	
2/2	Our Process/Project		
2/7-2/9	Project Kick Off All Week		Take home Final Exam
Week of 2/16	Project Spike Complete		Start Iteration 1
Week of 3/2	Iteration 1 Complete		Start Iteration 2
Week of 3/16	Iteration 2 Complete		Start Iteration 3
Week of 3/30	Iteration 3 Complete		Start Iteration 4
Week of 4/13	Iteration 4 Complete		Start Iteration 5
Week of 4/27	Iteration 5 Complete		