C-S 741 Software Engineering

Fall 2021 Section 01 (2629) / Section 800 (3167)
MWF 11: 00am to 11:55am
Centennial 2201

Instructor Information

Instructor: Dr. Mao Zheng
Physical Office hours: Tuesday 11:00am – 2:00pm Or set an appointment by email
Phone: 608-785-6808
Email: mzheng@uwlax.edu
Zoom Link: https://wisconsin-edu.zoom.us/my/mzheng
Meeting ID: 608 785 6808

Course Description

This course aims to introduce the principles of software engineering discipline so that software engineers will appreciate both technical and non-technical issues in the development of large-scale cost-effective software systems. *You will be learning a disciplined process of developing software and practicing it in a small project.*

Learning Outcomes

By the end of this course, you will be able to:

- Read and write UML class diagrams and UML use case diagrams.
- Read and write a requirements document, design document.
- Learn various software life cycle models that include the water fall model, the prototyping models (rapid, incremental and evolutionary), the spiral model, and the agile model.
- Choose an appropriate life cycle model for a given software development project.
- Develop requirements document, design document, code and test cases for a software project. Implement and demonstrate the project.

Textbook

"Object-Oriented Software Engineering – An Agile Unified Methodology", David C. Kung, ISBN 978-0-07-337625-7, McGrawHill.

References

"Object-Oriented Software Engineering – Practical Software Development using UML and Java", second edition, Timothy C. Lethbridge and Robert Laganiere, McGraw Hill, ISBN: 0077109082 , 2005

"Software Engineering – Principles and Practice", second edition, Hans Van Vliet, John Wiley &Sons, LTD, ISBN 0-471-97508-7.
"Software Engineering", 6th Edition, Ian Sommerville, Addison Wesley, 2001

Format

This is a face-to-face course. The course materials will be published through the learning management system, Canvas. You will need your UWL NetID to login to the course.

Grading Policies

Mid-Term Exam	20%	-- Friday Oct. 8, 2021
Final Exam	30%	-- Saturday Dec. 18, 2021 12:15pm – 2:15pm
Team Project	50%	

Attendance and Participation

To be successful in this course, you need to start working on your course project as soon as possible. This includes actively finding team members and forming your project team, researching and understanding the course project problem domain. The project deliverables are connected with lecture contents. Hence your class attendance and participation are very important for this course. Lecture contents mainly cover the general software development principles and guidelines in each development phase that needs to be applied in your course project. Be prepared and clarify the questions rising from your project and discover how these general principles and guidelines are applied in the specific problem domains through class discussions. The course is only effective if you participate in-class discussions and activities, and apply the lecture contents in your project.

Late Projects, Missed Quizzes / Exams

Project deliverables are due on the dates given in the project description. For extenuating circumstances that impact your ability to meet deadlines or participate in class activities, you are responsible for alerting me as soon as possible.

Project deliverables will not accepted after the due date, no make-up test or exam will be given except for University-excused absences.

COVID-19 Health Statement

All UWL students are encouraged to be vaccinated against COVID-19. All students are required to be masked in classrooms and other indoor campus communal spaces. Campus-wide mask guidance may change during the semester. Students with COVID-19 symptoms or reason to believe they were in contact with COVID-19 should call and consult with a health professional, such as the UWL Student Health Center (608-785-8558), regardless of their vaccination status. Students who are ill or engaging in self-quarantine at the direction of a health professional should not attend class. Students in this situation will not be required to provide formal documentation and will not be penalized for absences. However, students should:

- notify instructors in advance of the absence and provide the instructor with an idea of how long the absence may last, if possible.
- keep up with classwork if able.
- submit assignments electronically.
- work with instructors to either reschedule or electronically/remotely complete exams, labs, and other academic activities.
- consistently communicate their status to the instructor during the absence.

Instructors have an obligation to provide reasonable accommodation for completing course requirements to students adversely affected by COVID-19. This policy relies on honor, honesty, and mutual respect between instructors and students. Students are expected to report the reason for absence truthfully and instructors are expected to trust the word of their students. UWL codes of conduct and rules for academic integrity apply to COVID-19 situations. Students may be advised by their instructor or academic advisor to consider a medical withdrawal depending on the course as well as timing and severity of illness and students should work with the Office of Student Life if pursuing a medical withdrawal.

Academic Success and Overall Health

At UWL, we support your academic success and overall health. We know that students often experience a range of stressors that can impact learning and well-being. If you or someone you know is experiencing mental health concerns,or could benefit from effective academic strategies, there are free and confidential resources available to enrolled students through the Counseling & Testing Center (CTC). To learn more, visit CTC's website or call 608-785-8073.

Expectations for Graded Work

I provide students feedback and/or scores on assignments that require individualized grading before a further assignment of a similar format is due. Generally, I return work that requires individual feedback 7 days from the date the work was due. I will notify you if I am unable to grade the work within the 7-day timeframe, and will identify a revised return date. If you submit work after the due date, it may not be returned within 7 days.

The grades for any work that is graded electronically, such as scanned examinations, will be accessible to you within 7 days of the due date for the work. If you submit electronically graded work after the due date, it may not be accessible within 7 days.

Your graded coursework will be returned in compliance with FERPA regulations, such as in class, during my office hours, or via the course management system through which only you will have access to your grades.

Grading Scale

Letter Grade	Percentage Equivalent
A	93-100%
AB	89-92%
B	83-88%
BC	79-82%
C	70-78%
D	60-69%
F	59% - below

UWL Syllabus Policy Information & Statements

UWL encourages students to know the campus' important policies related to Covid-19 health statement, academic integrity & misconduct, religious accommodations, sexual misconduct, student concern procedures, students with disabilities, and veterans & active military personnel. These policies and statements can be found on the Syllabus Information website.

Individual instructors will articulate course requirements and any additional policies in the course syllabus and/or on a Canvas site associated with the course. UWL also encourages students to take advantage of the campus' many and varied student success resources; a listing is found on the UWL Student Success website.