COM S 4090/SE 4090 & Com S 5090
Fall, 2025
Instructor: Robyn Lutz

Syllabus

Meets: Tuesday & Thursday 9:30-10:45, Durham 171

Updates will be posted on Canvas.

Instructor: Dr. Robyn R. Lutz
Email: *rlutz@iastate.edu*
Phone: 4-3654
Office hours: 3:30 Wed, (230 ATAN); 1 Fri (https://iastate.zoom.us/my/rlutz), & by appointment

TAs:
Carter Wunsch (10 hrs/wk)
Email: *cwunsch@iastate.edu*
Office hours: 12:30 Wed (0112 Pearson) & by appointment

Abdurahman Mohammed (10 hrs/wk)
Email: *abdu@iastate.edu*
Office hours: 11:30 Wed (0112 Pearson); 2 Thurs (https://iastate.webex.com/meet/abdu) & by appointment

Pratik Maitra (10 hrs/wk)
Email: *pmaitra@iastate.edu*
Office hours: 4:30 Wed (0112 Pearson) & by appointment

Description: COM S 4090: Software Requirements Engineering. (Dual-listed with COM S 5090). (3-0) Cr. 3. Prereq: COMS 3090; for graduate credit: graduate standing or permission of instructor. The requirements engineering process including elicitation, requirements analysis fundamentals, requirements specification and communication, and requirements evaluation. Modeling of functional and nonfunctional requirements, traceability, and requirements change management. Case studies and software projects.

Student learning outcomes:
Students to be able to perform requirements analysis and review on medium-sized projects.
Students to be familiar with functional and nonfunctional requirements.
Students to be able to write a Software Requirements Specification document.

Textbook: There is no required textbook. Supplemental materials will be posted on Canvas.
Optional: Suzanne Robertson and James Robertson, *Mastering the Requirements Process: Getting Requirements Right*, **3rd edition**, Addison-Wesley, 2013.

Photography, Recording, Uploading, Distributing: No photography, recording, posting, uploading, distributing, or sharing beyond classmates of the course materials is permitted without prior written permission of the instructor.

Schedule (tentative):

I.   ***Discovering and Analyzing the Requirements:***
        Sept. 18: Homework 1 due

II.   ***Communicating the Requirements:***
        Oct. 2: Homework 2 due
        Oct. 7: Review
        Oct. 9 Exam 1

III.   ***Validating the Requirements***
        Oct. 30: Homework 3 due
        Nov. 13: Team Project delivery: Software Requirements Specification (SRS)

IV.   ***Evolving the Requirements***
        Nov. 13: Review
        Nov. 18: Exam 2
        Dec. 2, 4, 9, 11: 5090 Presentations: Attendance required for all 4090/5090 students
        Tues, Dec. 16, 9:45-11:45: RE's Future. Class meets; no final exam.

Grading:
Exam 1: 35%
Exam 2: 35%
Homework: 15%
Team Project: Software Requirements Specification (4090 & 5090) & Presentation (5090): 10%
Participation: 5% (in-class exercises; attendance at 5090 talks)

To pass the course, you must pass the Exam component. That is, if the average of your scores on the two exams is an F, you get an F in the course.

5090 students:
5090 students will have additional homework and exam problems. Each 5090 student also will make a presentation to the class on an advanced topic in a recent research paper. I'll give you some suggestions and choices.

Academic Honesty:
I pursue suspected cases of academic misconduct fully, in accordance with ISU policies requiring that all suspected cases of academic misconduct be reported to the Dean of Students. *A student found responsible for academic misconduct in 4090/5090* will both (1) receive a 0 on the relevant assignment or exam; and (2) have their final course grade reduced by a full letter grade.

Generative AI: This course requires that all work submitted by a student be generated by the student or by students as part of an assigned group. Any portion of an assignment done by someone else or another agent, including content generated by AI tools, is not allowed and will be treated as academic misconduct.

The class will follow Iowa State University's policy on academic misconduct ([5.1 in the Student Code of Conduct](#)). Students are responsible for adhering to university policy and the expectations in the course syllabus and on coursework and exams and for following directions given by faculty, instructors, and ISU Test Center regulations related to coursework, assessments, and

exams. Anyone suspected of academic misconduct will be reported to the Office of Student Conduct in the Dean of Students Office. Information about academic integrity and the value of completing academic work honestly can be found in the Iowa State University Academic Integrity Tutorial.

Talk to the instructor if you have any questions.

ISU Syllabus Statements:

Free Expression

Iowa State University supports and upholds the First Amendment protection of freedom of speech and the principle of academic freedom in order to foster a learning environment where open inquiry and the vigorous debate of a diversity of ideas are encouraged. Students will not be penalized for the content or viewpoints of their speech as long as student expression in a class context is germane to the subject matter of the class and conveyed in an appropriate manner.

No employee, student, applicant, or campus visitor is compelled to disclose their pronouns. Anyone may voluntarily disclose their own pronouns.

Accessibility Statement

Iowa State University is committed to advancing equity, access, and inclusion for students with disabilities. Promoting these values entails providing reasonable accommodations where barriers exist to students' full participation in higher education. Students in need of accommodations or who experience accessibility-related barriers to learning should work with Student Accessibility Services (SAS) to identify resources and support available to them. Staff at SAS collaborate with students and campus partners to coordinate accommodations and to further the academic excellence of students with disabilities. Information about SAS is available online at www.sas.dso.iastate.edu, by email at accessibility@iastate.edu, or by phone at 515-294-7220.

Prep Week

This class follows the Iowa State University Prep Week policy as noted in section 10.6.4 of the Faculty Handbook.

Discrimination and Harassment

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515-294-7612, Hotline 515-294-1222, email eooffice@iastate.edu

Mental and Well-Being Resources

Iowa State University is committed to proactively facilitating all students' well-being. Resources are available on the ISU Student Health and Wellness website (https://www.cyclonehealth.iastate.edu).

Religious Accommodation

Iowa State University welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request the reasonable accommodation for religious practices. In all cases, you must put your request in writing. The instructor will review the situation in an effort to provide a reasonable accommodation when possible to do so without fundamentally altering a course. For students, you should first discuss the conflict and your requested accommodation with your professor at the earliest possible time. You or your instructor may also seek assistance from the Dean of Students Office at 515-294-1020 or the Office of Equal Opportunity at 515-294-7612.

Contact Information for Academic Issues

If you are experiencing, or have experienced, a problem with any of the above statements, email academicissues@iastate.edu