

## Com S 409/SE 409 & Com S 509

Fall, 2017

**Meets:** Tuesday & Thursday 9:30-10:50  
Science 0152

**Instructor:** Dr. Robyn R. Lutz  
Email: [rlutz@iastate.edu](mailto:rlutz@iastate.edu)  
Phone: 4-3654  
Office: 228 Atanasoff  
Office hours: TTh 11 & by appointment

**TA:** Jinu Susan Kabala  
Email: [jsusan@iastate.edu](mailto:jsusan@iastate.edu)  
Office: B04 Atanasoff  
Office hours: MW 4:00-5:00 pm & by appointment

**Textbook:** Suzanne Robertson and James Robertson, *Mastering the Requirements Process: Getting Requirements Right*, 3<sup>rd</sup> ed., Addison-Wesley, 2013, and supplemental posted materials.

Also Required for 509 students: Axel van Lamsweerde, *Requirements Engineering: From System Goals to UML Models to Software Specifications*, Wiley, 2009.

**Description:** COM S 409: Software Requirements Engineering. (Dual-listed with COM S 509). (Cross-listed with S E). (3-0) Cr. 3. F. Prereq: COMS 309. The requirements engineering process including identification of stakeholders, requirements elicitation techniques such as interviews and prototyping, analysis fundamentals, requirements specification, and validation. Use of Models: State-oriented, Function-oriented, and Object-oriented. Documentation for Software Requirements. Informal, semi-formal, and formal representations. Structural, informational, and behavioral requirements. Non-functional requirements. Use of requirements repositories to manage and track requirements through the life cycle. Case studies, software projects, written reports, and oral presentations will be required.

**Student learning outcomes:**

Students to be in a position 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.

**Schedule (tentative):**

Sept. 7 Homework 1 due

Sept. 28: Homework 2 due

Oct. 10: Homework 3 due

Oct. 10: Review

Oct. 12: Exam 1

Nov. 2: Homework 4 due

Nov. 16: Team Project delivery, Software Requirements Specification

Nov. 28, Nov. 30, Dec. 5, Dec. 7: Team Presentations to class (attendance required)  
Dec. 7: Review  
Dec. 12, 9:45-11:45, Exam 2 (tentative ISU finals schedule)

**Grading:**

Exam 1: 30%

Exam 2: 30%

Homework and in-class exercises: 20%

Project report and presentation: 20%

**Academic Honesty:** Students are expected to read, understand and comply with the ISU Student Conduct Code: "The academic work of all students must comply with all university policies on academic honesty. Examples of academic misconduct are:

- A. Attempting to use unauthorized information in the taking of an exam;
- B. Submitting as one's own work, themes, reports, drawings, laboratory notes, computer programs or other products prepared by another person;
- C. Knowingly assisting another student in obtaining or using unauthorized materials; or
- D. Plagiarism."

Please see <http://policy.iastate.edu/policy/SDR#a42> &/or talk to the instructor if you have any questions. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office.

**Accommodation Requests:** Iowa State University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Any student who may require an accommodation under such provisions should contact me no later than the end of the second week of class or as soon as you become aware of it.

**Photography and Recording:** *No photography or recording in the classroom, including with phones and other devices, is permitted without prior permission of the instructor.*