

# Com S/SE 417 Software Testing

Fall, 2018

**Meets:** Tuesday & Thursday 12:40-1:55  
Hoover 1227

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Office hour: Monday 3:30-5pm & by appointment

**Textbook:** Paul Ammann and Jeff Offutt, *Introduction to Software Testing*, 2<sup>nd</sup> edition and supplemental posted materials.

**Description:** COM S 417. Software Testing. (Cross-listed with S E). (3-0) Cr. 3. S. Prereq: COM S 309; COM S 230 or CPR E 310; ENGL 250, SP CM 212. Comprehensive study of software testing, principles, methodologies, management strategies and techniques. Test models, test design techniques (black box and white box testing techniques), test adequacy criteria, integration, regression, system testing methods, and software testing tools.

**Student learning outcomes:**

Students to be able to design tests to meet realistic coverage criteria.  
Students to be in a position to apply standard software testing techniques.

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

**Schedule (tentative):**

Sept. 18: Homework 1 due

Oct. 2: Homework 2 due

Oct. 4: Review

Oct. 9: Exam 1

Oct. 30: Homework 3 due

Nov. 15: Review

Nov. 27: Exam 2

Nov. 29: Advanced Testing Techniques report due

Nov. 29, Dec. 4, 6: Invited Presentations (attendance required)

Tues, Dec. 12, 2:15-4:15, In-class evaluation of advanced testing techniques during Final Exam period.

**Grading:**

Exam 1: 30%

Exam 2: 30%

Homework and in-class exercises: 20%

Project report and presentation: 20%

**Academic Honesty.** The class will follow Iowa State University's policy on academic dishonesty. 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.

**Accessibility Statement.** Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to meet with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes. Eligible students will be provided with a Notification Letter for each course and reasonable accommodations will be arranged after timely delivery of the Notification Letter to the instructor. Students are encouraged to deliver Notification Letters as early in the semester as possible. SAS, a unit in the Dean of Students Office, is located in room 1076, Student Services Building or online at [www.sas.dso.iastate.edu](http://www.sas.dso.iastate.edu). Contact SAS by email at [accessibility@iastate.edu](mailto:accessibility@iastate.edu) or by phone at 515-294-7220 for additional information.

**Dead Week.** This class follows the Iowa State University Dead 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](mailto:eooffice@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 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.** If you are experiencing, or have experienced, a problem with any of the above issues, email [academicissues@iastate.edu](mailto:academicissues@iastate.edu)