# Spring 2014 COM S 417 (SE 417) Syllabus Software Testing

Course Description: This course presents a comprehensive study of software testing, principles, methodologies, tools, and techniques. Topics include testing principles, test automation and coverage, graph-based testing, logic-based testing, input space partitioning, regression testing, and various testing tools.

Class Meeting Time & Place: T/R: 12:40–2:00pm; B0029 Atanasoff (Basement, room 29)

Instructor: Dr. Kathryn Stolee E-mail: kstolee@iastate.edu Office: 209 Atanasoff

Office Hours: T 2:00pm - 3:00pm, R 11:30am - 12:30pm, or by appointment

Homepage: Blackboard (https://bb.its.iastate.edu/)

Text: Introduction to Software Testing. Paul Ammann and Jeff Offutt. First Edition.

Some supplementary materials from the second edition may be used. As the second edition will not be available publicly for Spring 2014, these chapters will be available for download from Blackboard.

**Homework Assignments** Several (3-4) homework assignments will be assigned. These will be available on Blackboard and discussed in class on the day they are assigned. Unless otherwise notes, all homework assignments will be handed in by e-mail as follows:

To: kstolee.handin@gmail.com Subject: [SE 417] <assignment>

Please structure your subject line as shown, replacing **<assignment>** with the relevant assignment name. Be sure to *sign your name* within the e-mail so we are sure to attribute the assignment to the correct person. *Homework assignments must be submitted before class on the day they are due.* Late submissions will be assessed at a 10% penalty per 24-hour period.

Research Project and Presentation Working in small groups (likely 2-3), you will be assigned (or may select) a modern software system for which you will design and implement an automated test plan. Your deliverables will be a test plan report detailing how you tested the system and a presentation to the class that includes a working prototype of your automated tests. These presentations will be conducted during Dead Week. The test plan reports will be due on the Friday of Dead Week at 12:00 noon.

## **Grading Policies:**

30% all homework assignments

20% research project and presentation

20% midterm (closed-book, in-class)

30% final exam (comprehensive, in-class, closed-book)

The following grade scale will be used:

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 [100\%, 99\%] \ A+; \ (99\%, 93\%] \ A; \ (93\%, 90\%] \ A-; \ (90\%, 88\%] \ B+; \ (88\%, 83\%] \ B; \ (83\%, 80\%] \ B-; \ (80\%, 78\%] \ C+; \ (78\%, 73\%] \ C; \ (73\%, 70\%] \ C-; \ (70\%, 68\%] \ D+; \ (68\%, 63\%] \ D; \ (63\%, 60\%] \ D-; \ (60\%, 0\%] \ F
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## University Policies

## **Academic Dishonesty**

There is no reason to cheat. Cheating will result in a grade of F for the class. If you are unable to complete an assignment, or you cannot do the assignment, contact your instructor. All work must be your own, original work unless otherwise stated.

This class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office. http://www.dso.iastate.edu/ja/academic/misconduct.html

#### **Disability Accommodation**

Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact (instructor name) to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with (instructor name), you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu . Retroactive requests for accommodations will not be honored.

#### Dead Week

This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook http://www.provost.iastate.edu/resources/faculty-handbook.

#### Harassment and Discrimination

Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or the Office of Equal Opportunity and Compliance at 515-294-7612.

## Religious Accommodation

If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the Dean of Students Office or the Office of Equal Opportunity and Compliance.

### **Contact Information**

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