

ITIS 3320

Course title: Software Testing and Quality Assurance

Course date: The class meeting times are: August 25, 27, September 1, 3, 8, 10, 15, 17, 22, 24, 29, October 1, 6, 8, 13, 15, 20, 22, 27, 29, November 3, 5, 10, 12, 17, 19, 24, December 1, 3, 8.

Location: Woodward Hall 155

Meeting day(s): Tuesday and Thursday

Meeting time(s): 11:00am-12:15pm

Textbooks

Required reading: *Testing Computer Software*
Kaner Cem, Falk Jack, Nguyen Hung Quoc
ISBN 0-471-35846-0

Instructor Information

Name: Yongge Wang

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Office hours: Thursday 2:00pm-4:00pm

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Teaching assistants: Wenjuan Xu (wxu2@uncc.edu)

Attendance

Rules: Attendance is required for all scheduled classes. Two unexcused absence will cost you 5 points deduction from your final points, four unexcused absences will cost you 10 points deduction from your final points, and five or more unexcused absences may result in the failure of the course.

- Topic 1: Overview of Quality Assurance Techniques
- Topic 2: What is Quality? Undecidability theory, Verification and Validation
- Topic 3: Junit Testing
- Topic 4: Document/Code review techniques (e.g., Fagan Review and Active Review)
- Topic 5: Functional Testing and Black Box Testing
- Topic 6: Risk Assessment and Case Study of Microsoft Security Development Lifecycle - IT
- Topic 7: Unit Testing and Coverage Analysis Techniques

- Topic 8: Testing Tools and Web Application Service Testing
- Topic 9: Object-Oriented Software Unit Testing and Coverage Analysis Techniques

Grading

Policy: Midterm exam1: 15%
 Midterm exam 2: 15%
 White box testing: 15%
 Black box testing: 20%
 Assignments: 30%
 Participation: 5%

Typically, A will be given for a total of 90 and above, B will be given for a total of 80 and above, C will be given for a total of 70 and above, D will be given for a total of 60 and above.

Later submission

Cost: Students who fail in submitting their assignments by the specified deadlines will receive a reduced mark, on the basis of a 33% reduction for every day after the deadline (regardless of whether it is a working day or not). Projects submitted three days after the deadline will not be graded and the students will receive a 0 mark. Academic Integrity

Important Dates

Notice: These dates may change, please check this site regularly for the most recent version

Dates: Midterm Exam 1: will be announced in class
 Midterm Exam 2: will be announced in class
 December 17 (Thursday 3:00-6:00pm) : Final exam

Academic Integrity

Policy: Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity (Catalog p. 375). This code forbids cheating, fabrication, or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. There are no special requirements regarding academic integrity in this course. The code will be strictly enforced and is binding on the students. Grade and academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases

the course grade is reduced to an F. Copies of the Code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the instructor immediately.