CSE 360 Introduction to Software Engineering Spring 2016

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BYENG 524

Office hours: Monday, Wednesday 9:30-11:30 and by appointment

Course Description: Software lifecycle models; software specifications and standards; teambased software development and project management; testing and quality assurance; legal and ethical issues. Prerequisites: CSE 240 or CSE 220

Text: Object-Oriented and Classical Software Engineering, Stephen Schach, 8th Edition, 2010, ISBN: 978-0073376189, McGraw-Hill Higher Education.

Course Goals: Students who complete this course will

- 1. Understand and apply basic software engineering techniques and approaches covering requirement, design, coding, testing, and maintenance within a process model
- 2. Develop an awareness of national and international standards
- 3. Be able to follow code of ethics
- 4. Be able to elicit and model requirements
- 5. Be able to use software architecture models
- 6. Be able to create analysis and design models
- 7. Be able to develop code
- 8. Be able to test code
- 9. Be able to plan and track software development activities
- 10. Be able to develop software artifacts using current software engineering tools
- 11. Be able to conduct software quality assurance
- 12. Be able to document and evaluate software product artifacts and team activities
- 13. Be able to present software engineering activities and products in oral and written forms

Topics:

- Software lifecycle models
- Project management
- Software development methods
- Software tools for team-based software engineering
- Quality assurance

Software Tools: You will be using several software development tools in this class. The required IDE is Eclipse (http://eclipse.org) and the programming language is Java.

Website:

- The course website is located on Blackboard and is accessible through MyASU.
- Check the website regularly for updates and information.

Work Requirements:

• Exams (Topic Exams 45%)

- There are 4 exams given throughout the semester. Your top 3 exam grades are used to calculate your grade.
- o The dates of the exams are
 - February 5
 - March 4
 - April 8
 - May 2 (12:10)
- Exams are given only during the date and time scheduled. If you miss an exam, that exam is given a zero grade. Exams are not available to be taken early or at alternative times.
- Exams are closed book/notes.
- o SmartPhones, watches, and other electronic devices may not be used during exams.
- You must earn a grade of 60% or higher on your top 3 exams to receive a minimum grade of C in the class.

• Individual Assignments (30%)

- There are six individual assignments that focus on software development tools and techniques.
- Late assignments are accepted up to two days late with a penalty of 25%.

• Team project (15%)

- O You will work on a small team to develop a project in multiple releases.
- o No late team project submittals are accepted.
- O Your team project grade may be different from your team mates based on peer feedback.

• Exercises (10%)

- o In class exercises are given throughout the semester. The emphasis of the exercises is problem solving and application of the lecture material.
- Exercises are open notes, may be done with a partner and must be completed in the time allotted. There are no makeup exercises and exercise are not available outside of class.
- o Two exercise grades will be dropped.

Excessive Collaboration or Assistance (i.e. "Cheating"): You are encouraged to learn from each other but copying from any source is not acceptable. Violators of this policy are given the toughest penalty possible. For information on the university academic integrity policy, see http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm.

Expectations: You are expected to

- Be prepared for, attend and be engaged in all scheduled lectures. Lecture notes are posted but example solutions may not be. You are responsible for all content presented in class.
- Read all assigned reading and other materials.
- Successfully complete all exams, assignments and in-class exercises.
- Do your own work.

Changes to the syllabus: Any corrections or changes are announced in class.