

# University of Washington

## Computer Science & Engineering 403: Software Engineering, Spring 2013

### Course Syllabus

#### Instructor:

**name:** Marty Stepp  
**email:** stepp at cs  
**office:** CSE 636  
**office phone:** (206) 685-2181  
**office hours:** *see course web site*

#### Course Content and Learning Objectives:

This course is an introduction to software engineering using a large group project. You will learn about:

- the phases of software development (the software "lifecycle")
- software development styles and methodologies, including "agile" development
- software requirements analysis and specification
- design concepts and techniques, including Unified Modeling Language (UML)
- implementation practices such as design patterns
- testing, verification, and quality assurance (QA) techniques
- software and tools for software engineering and rapid development
- team and management skills for completing a project in a large group

#### Lecture and Section Times:

MWF 10:30am - 11:20am, MOR 220

T/Th 9:30am - 10:20am, MGH 389 (discussion section led by TAs / group project work time)

#### Textbooks and Readings:

There is no textbook, but there will be **reading assignments** throughout the quarter that will be posted to the course web site to print or read online. For many of the reading assignments, we will assign questions posted online for you to answer about the reading. You will submit your answers to these questions online. These will be part of your course grade, and they will not be accepted late. To receive full credit, you must answer the questions about **half** or more of the assigned readings. If you answer more than half, we will drop your lowest score(s) if you lose any points on any of your reading assignments, increasing your chance to get a high score.

#### Course Web Site:

<http://www.cs.washington.edu/403/>

#### Grading:

Graded work will receive categorized point values, with the following categories and their respective weights:

- 10% online questions based on assigned readings
- 70% group project (to be distributed among several phases, as described later in the course)
- 20% final exam: **Monday, June 10, 2013, 8:30 - 10:20am, MOR 220**

Your percentage is mapped onto the 4.0 grade scale. We do not have a fixed mapping, but historically the median (middle) grade for this course is around 3.3-3.4. We will post scores periodically so that you can see where you stand with respect to your classmates.

## Turn-in and Lateness Policy:

Assignments will have due times written on their specifications. Written assignments are submitted by hand in class, at the beginning of lecture on the due date. Programming assignments are submitted electronically.

Project phases are turned in using an **online submission** system. The URL for this system can be found on the course web site. Assignments will not be accepted by other turn-in methods unless prior permission is given by the instructor or TA. It is your responsibility to ensure that your turn-in is completed successfully.

Questions about readings are not accepted late. Other assignments may be turned in up to 24 hours late with a **10%** penalty, or 24 to 48 hours late with a **20%** penalty. No assignments will be accepted more than 48 hours late for any reason. If the assignment is written, it can be slid under the instructor's door to submit it late.

## Final Exam:

The final exam is generally a **take-home exam**, either partially or completely. You may use your books, handouts, printed solutions to your assignments, or any other written materials. You must work alone on it.

If you must miss an exam, you must notify the instructor at least 48 hours in advance of the time of the exam, and you must have a valid excuse. Make-up exams will not be given without instructor's permission.

## Computing and Labs:

The course will be taught using **Java** and its associated tools. If you and your group wish to use a different set of language(s) and tools, you must demonstrate clearly to the instructor that corresponding features and utilities exist in your environment (such as tools for unit testing, source control, development environments, etc.)

If you **work from home**, it is your responsibility to ensure that your program will run on the school's machines, since that is the environment in which your code will be tested and graded. This also means that your code must constrain itself to language features that exist in the labs.

## Groups:

A large portion of the grade for this course will come from working on a large software project in a group with other students. As a group member, you will be expected to meet all of the following **group requirements**:

- contribute a significant amount to the analysis, design, implementation, and testing of your project
- meet at least once weekly with your group at a scheduled time
- meet at various times with the instructor and/or TA, together with your group, at a scheduled time
- read and respond regularly to email from your group partners
- communicate with your group partners as needed by email, in person, by phone, or otherwise
- send a weekly group progress email to the instructor
- hold your group partners accountable for their work, and report to the instructor if they fail to do it

## Collaboration Policy:

Academic integrity is generally not a large problem in this course, but just to be sure, we want to make a few rules clear. Assigned readings and questions about them, along with other specified individual assignments, are to be completed by yourself. You may discuss ideas about these assignments with other students. But you should not divulge answers or program code on such assignments to other students. You should also make a reasonable effort to make sure that your answers cannot easily be copied by others.

Much of the work in this course, particularly the large project, is performed in groups. The rules here are similar: Groups may discuss ideas about their design or their project with other groups, but they should not share their actual design documents, code, or other work with other groups.

When in doubt, ask the instructor whether a particular behavior is acceptable under this policy.