University of Washington CSE 303: Software Tools, Course Syllabus, Spring 2009

Instructor

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Course Overview

In this course you will learn about:

- usage of the GNU/Linux operating system environment
- Unix/Linux command-line utilities for file editing, scripting, string and file manipulation
- introductory C and C++ programming e.g. pointers, arrays, memory/resource management, preprocessor
- programming tools such as debuggers, profilers, compilation managers, and version control
- good software-engineering practices regarding specification, partner programming, reuse, and testing
- the societal/ethical implications of computing

You will master none of these skills, but you will gain familiarity with them. An important goal of the course is to become better able to teach yourself new concepts through your own reading, searching, and asking questions. Be warned: the lectures and handouts provided by the instructor will not be sufficient for you to complete assignments without additional reading and study on your own. You are now a CSE major and are therefore held to a higher academic standard.

Lecture Time

MWF 11:30 AM - 12:20 PM, EEB 037

Course Web Site

http://www.cs.washington.edu/303/

All resources from class will be posted here. Check the web site daily for any important course-related announcements.

Textbooks

Barrett, D. Linux Pocket Guide. ISBN 0596006284. Required.

Harbison, S., Steele, G. C: A Reference Manual, 5th Edition. ISBN 013089592X. Required.

No assignments or required readings will be given directly from these textbook, so you may choose not to purchase them if you like. However, they make useful references when learning Unix and C and are especially helpful for looking things up during on homework assignments. Also, the exams in this course will be open-book, so it may be advantageous to own the books to bring as a reference during exams.

Computer Access and Software

The department operates computer labs in the CSE basement (rooms 002, 006, and 022). The recommended software for the course is the Linux operating system (Ubuntu or Fedora distributions), and utilities such as bash, gcc, gdb, make, cvs, svn, and other standard Unix commands.

The course web site contains links to download this software free of charge if you want to work at home.

Grading

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50% weekly homework assignments
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5% written work(s) on societal impact of computing

20% midterm (Monday, May 4, 2009, in class)

25% final exam (**Wednesday, June 10, 2009**, 2:30 - 4:20pm, in class)

This maps to the 4.0 scale roughly as follows, though we make no absolute guarantee of grade breakdowns.

90%: at least 3.5 80%: at least 2.5 70%: at least 1.5 60%: at least 0.7

Exams

Our exams are open-book and open-notes. You may bring any written materials, such as textbooks, printed handouts, homework assignments, or programs. No electronic devices may be used, including calculators.

Make-up exams will not be given except in case of a serious emergency. If you must miss an exam, even if you are sick or injured, you must contact the instructor *before* the exam (or arrange for someone to do so). You must show evidence that you are physically unable to take the exam, such as a doctor's note specifically mentioning the CSE 303 midterm, before the exam. No make-ups will be granted for personal reasons such as travel, personal hardship, to ease your exam week schedule, or leisure. No student will be permitted to take an exam early for any reason.

Homework

Homework consists of weekly programming assignments submitted electronically from the course web site. Most will be individual assignments, but some will be done in small groups.

Assignments will be graded on "external correctness" (behavior) and "internal correctness" (style and design). Disputes about homework grading must be made within 2 weeks of receiving the grade.

Lateness

Each assignment will have a specific due date in its spec and on the web site. An assignment can be submitted up to **24 hours late** for a loss of **10%** of its points. No assignments will be accepted more than 24 hours late or after the last day of class. Extensions will not be given except with extenuating circumstances or emergency as decided by the instructor.

To provide some lenience for lateness, each student receives **2 "late days"** for use on homework assignments. Each late day allows you to submit one assignment up to 24 hours late without penalty. For example, you could use a late day and submit a program due Thursday 11pm on Friday by 11pm. Only 1 late day may be used on any particular assignment.

Academic Integrity

Unless otherwise specified, assignments must be completed individually; all work you submit must be your own. You may discuss general ideas of how to approach an assignment, but never specific details about code to write. Any help you receive from or provide to classmates should be limited and should never involve details of how to code a solution.

On individual assignments, you must abide by the following:

- You may not work as a partner with another student on an assignment.
- You may not show another student your solution to an assignment, nor look at his/her solution.
- You may not have another person "walk you through" an assignment, describe in detail how to solve it, or sit with you as you write it. You also may not provide such help to another student. This includes current or former students, tutors, friends, TAs, web site forums, or anyone else.

On team assignments, the above rules are applied on a per-team basis. That is, one team should not share its work with any other team nor accept work from any other teams or outside sources.

Under our policy, a student who gives inappropriate help is equally guilty with one who receives it. Instead of providing such help to someone who does not understand an assignment, point them to other class resources such as lecture examples, the textbook, office hours, or emailing a TA or instructor. You must not share your solution and ideas with others. You must also ensure that your work is not copied by others, such as making sure to log out of shared computers, not leaving printouts of your code in public places, and not emailing your code to other students or posting it on the web.

We enforce this policy by running similarity detection software a few times per quarter over all student programs, including programs from past quarters. Students who violate the policy are sometimes given reduced scores or sent to a misconduct committee. Please contact the instructor if you are unsure whether a particular behavior falls within our policy.