Quick Facts

Class Overview

Course Code:	CS 182
Course Title:	Operating Systems
Website:	http://www.cs.hmc.edu/cs182/
or	http://www.cs.hmc.edu/courses/2004/spring/cs182/
Wiki:	http://www.cs.hmc.edu/cs182/wiki/bin/view/
Help Email:	cs182help@cs.hmc.edu
Professor:	Melissa O'Neill ‹oneill@cs.hmc.edu›, Olin 1243, x79661
Prerequisite:	CS 105 (or equivalent)
Credit Hours:	3
Class Meetings:	Tues/Thurs 2:45–4:00 pm TG 103

Official Outline (As Posted)

Students taking this course will gain a comprehensive grounding in the area of operating systems. Students will gain an understanding of the theoretical and practical issues and problems in operating system design. Lectures will focus on the principles behind the design of all operating systems, but students will also see how these principles have been applied in real operating systems including Linux, Darwin/Mach, BSD, Solaris, and Windows XP.

Group projects will provide students with experience in working with and extending a real operating system, providing a valuable practical backdrop to the principles learned in class.

As in any upper-level computing course, students will be expected to learn about some aspects of topic areas through reading assignments and self-directed research.

Electronic Access

Much of the communication for this course will be handled electronically through the class website and mailing list(s). You are responsible for being familiar with announcements posted to the class mailing list(s) and with the contents of the class website.

Website

The class website is available at

http://www.cs.hmc.edu/cs182/

This website is also reachable from the CS department's home page (via the Course Schedule link). As well as providing useful general information (such as how to find me when you have questions), homework assignments will be posted on the class website.

Wiki

The class wiki website is available at

http://www.cs.hmc.edu/cs182/wiki/bin/view/

To reduce the risk of this site being archived by web spiders, there are *no links* to this website from the main course site. You can, of course, bookmark the site yourself.

This site allows *you* to post material about CS 182, including course notes.

Mailing Lists

The class mailing list is cs-182-l@hmc.edu. If you were registered in the course on the first day of classes, you should already be on the list. If you registered late, you may need to join the appropriate list by sending mail from your preferred account to listkeeper@hmc.edu, with a message body containing subscribe cs-182-l.

Most class-related questions should be sent to the help alias, cs182help@cs.hmc.edu.

Computer Accounts

All homework assignments will be submitted on turing, the department's Sun Enterprise 3000. You must have an account on turing to complete the work for this class. If you do not already have an account, you should fill out an account-request form (available from the CS system administrator in Beckman B101).

If you have an account that is no longer active, see the system administrator to reactivate your account.

You can only reach turing from machines in the Beckman terminal room or by using `ssh`—you will need an `ssh` client on your personal computer. See http://www.cs.hmc.edu/tech_docs/qref/ssh.html for more information on obtaining, installing, configuring, and using `ssh` clients.

Email Accounts

While you can receive mailing-list mail at any address you choose, homework grades and other material meant specifically for you will be sent to your turing email address. It is your responsibility to check your email on turing regularly or to have a ~/.forward file that forwards your turing email to an account that you do check regularly.

Group Programming

Some programming assignments will be undertaken in assigned groups of two. As much as possible, we will try to have the same two people work together throughout the semester.

Collaboration and the Honor Code

All students—even those from other colleges—are expected to understand and comply with Harvey Mudd College's Honor Code. If you haven't already done so, you must read, sign, and abide by the computer science department's interpretation of the Honor Code to participate in this course.

You are encouraged to discuss general features of assignments and the ideas involved with other students, including general approaches to the problems, bugs in the specification, how long you've spent working on a problem, and so forth. You may also help each other with issues related to completing the assignments—how to use Unix, C++ syntax, and the like.

You may also use example code—such as code from your textbooks or other *provided* reference materials—as a starting point for designing your own code. When actually coding, you may not copy from such reference sources.

You must not exchange literal copies of material, whether that material consists of code, program output, or English-language text (e.g., documentation). You also may not copy material from published or online sources, with or without cosmetic changes (such as altering variable names) without explicit permission. If you do have permission to use externally written material, you must attribute it properly and clearly indicate which material is yours and which material is not yours.

If you aren't sure whether something you've done or plan to do is allowed, you should explicitly document what you did and—if at all possible—consult with the course staff, ideally *before* you take the questionable action. Similarly, document any extensive or particularly important help you obtain, even if that help seems legitimate. If the questionable material or extensive help is explicitly marked as such, you might lose points but avoid violating the Honor Code.

These principles apply to all methods and media of discussion or exchange (voice, writing, email, etc.).

Attendance

You are expected to attend every class. I will not be taking attendance, but many classes will have group exercises that will affect your final grade (both directly, because I grade for class participation, and indirectly, because questions on the exams are often similar to the group exercise questions). If you miss a class, you must find out what happened and get notes from a fellow student.

Due Dates

Unless announced, there are no automatic extensions to homework (or other) deadlines. Late submissions will not be accepted. If you are unable to turn in an assignment by its due date, you may be able to get an extension if

1. There are extenuating circumstances (that were unforeseeable)

2. You tell me that you're having problems (either directly or via someone else, such as the Dean of Students) as soon as you know—*before* the assignment's due date

3. You negotiate appropriate arrangements with me to make up the work

I won't allow you to get very far behind in your work unless you are in a situation that could entitle you to an incomplete at the end of the term (e.g., a major medical problem).

Also, please note that even if you have met the requirements listed here, I may still deduct points.

Illness

If you get sick during the term, notify me immediately, even if you think that being sick will not affect your ability to complete your assignments. You should also notify me any time that you're sick enough to miss *any* classes (not just CS 182) or find that your performance is below par for any reason.

Getting Help

If you need help with a problem, send email to the `cs182help@cs.hmc.edu` mailing list, which is read by me and the graders, maximizing your chances of getting a quick answer to a question.

If you have sensitive issues—such as personal issues or Honor Code violations—that you need help with, contact me directly.

Textbooks

Textbooks cover much of the material discussed in lectures. By reading your textbooks prior to class and being aware of what they cover, you can significantly reduce the amount of note taking you need to do in class.

Required Texts

There is one required textbook for this course:

- Andrew S. Tanenbaum, *Modern Operating Systems* , second edition. Addison-Wesley, 2001. ISBN 0-13-031358-0.

  Be sure to get the second edition of Tanenbaum, not the first!

Terminal Room Library

The Terminal Room, Beckman B102, has a small library of useful reference books. That library includes the required textbook and other books that you may find useful.