CSCI 333 – Operating Systems
Fall 2009

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Class: MWF 2:35pm–3:45pm in Reeve 212
Office Hours: TBD (or by appointment)

Course Description

Per the course catalog, this course is a survey of operating systems issues involving both hardware and software components. Topics covered include processors, interrupts, I/O devices, process management, concurrency, memory management, file systems, and system organization.

Course Objectives

At the completion of this course, you should be able to:

- Define "Operating System" and describe the essential components of an operating system and their respective responsibilities.

- Design and implement algorithms for essential components of an operating system.

- Describe how different algorithms for core operating system components affect the performance of application software.

- Design and implement software systems comprised of components that operate in parallel.

Texts

"Operating System Concepts" (8th edition) by Silberschatz, Galvin, and Gagne. ISBN 978-0-470-12872-5.

Schedule

Topic	Weeks
Operating systems overview and the C programming language	2
Processes and threads	2
Scheduling	2
Synchronization and deadlock	2
Memory and memory management	2
File systems and I/O	2
Security	1

Attendance Policy

This course does not have a rigid attendance policy in the sense that there is a rule describing the number of lectures that you must attend. However, please do not take this as a license to never show up to class; I expect you to be at each class meeting. Your attendance in lecture is important (beyond the usual reasons) in that homeworks, due dates, and readings will be assigned in person during lecture.

Academic Honest Policy

Please read and understand the College's Academic Honesty Policy (which you can find in the Student Handbook). I will let you know what materials are appropriate to use for reference for specific assignments when they are assigned.

Since collaboration with your colleagues will be an important part of your careers, collaboration is permitted on all graded assignments (with the exception of exams). However, unless I state otherwise, you must turn in your own copy of each assignment *in your own writing*. If the ideas/algorithms expressed in an assignment are not entirely your own (*i.e.*, you worked with one of your colleagues), you must include a note stating who you worked with and the percent contributions of everyone who contributed to the work (including your contribution).

Grading Policy

There are four components to your grade:

- **Homework:** Homework will be handed out periodically throughout the semester; assignment details and due dates will be describe upon being distributed. **Weight: 30%**

- **Programming Projects:** You will be assigned several programming projects of varying size throughout the semester. **Weight: 40%**

- **Tests:** There will be two midterm exams given during the semester on October 2 and November 20 (these dates are *tentative*). **Weight: 20%**

- **Final:** A cumulative final exam will be given on Wednesday, December 16 at 8:30am. **Weight: 10%**

Other policy matters:

- **Grading Scale:** I will use the standard 90-80-70-60 scale with pluses and minuses to assign grades.

- **Late Homework:** I will accept homework beyond its due date with the penalty of 30% of the assignment's value per day. For example, if a homework is work 10 points and it is turned in two days late, the maximum amount of points one can receive is 4 points.

- **Exam Absence:** If you are going to miss an exam due to conflict, you must let me know before the exam. If you miss an exam due to some other circumstance, you must let me know as soon as possible and provide me with documentation. Valid circumstances include events like illness and family trauma. Invalid circumstances are events like hangovers and faulty alarm clocks.

- **Academic Accommodations:** Please let me know immediately if you have any disability that requires accommodation.

This syllabus is subject to change.