

Tentative Syllabus -- Spring 2005

**Department of Computer & Information Science
CSCI 503
Operating Systems
Tentative Course Syllabus
Spring 2005**

TR 5:45-7:00pm, SL206

Instructor	Mihran Tuceryan
Office	SL 280K
Office Hours	by appointment.
Email	tuceryan@iupui.edu
Phone	274-9736
Grader	Yu Zhou
Email	zhouy@iupui.edu

Textbook:

- Modern Operating Systems, 2nd Edition, by Andrew S. Tanenbaum, Prentice-Hall.

Course Objectives:

This course is meant to be an introduction to the concepts of operating systems. After taking this course, you will be familiar with the basic concepts and methods used in modern operating systems. The list of topics to be covered in this class will be the following:

1. Introduction and history
2. Computer systems structures
3. Operating systems structures
4. Processes & Threads
5. CPU scheduling
6. Process synchronization
7. Deadlocks
8. Memory management
9. Virtual memory
10. File-systems interface
11. File-systems implementation
12. Secondary-storage structure
13. Protection and security

Other topics will be covered if we have time.

Grading Information:

Programming Projects			30%
Midterm (middle of semester):	Date: Tuesday, March 8, 2005, in class	Coverage will be what has been covered up to the midterm.	35%
Final:	Date: Tuesday, May 3, 2005, 5:45-7:45pm, official university final exam time	Coverage will be comprehensive.	35%
Total			100%

The final grade is going to be computed based on these weightings. In each category, the grades will be normalized to equal weights before the final weight is applied. That is, if there are five projects, they will all have equal weight and the total will be normalized to 100. After that, they will be multiplied by the proper weight. So, the final course score for cs503 will be computed by the formula:

course_score (out of 100) = $0.3 * \text{project_total} + 0.35 * \text{exam1} + 0.35 * \text{final}$

project_total = $(\text{proj1} + \text{proj2} + \dots + \text{projN}) / N$

I do not assign letter grades to individual exams and projects during the semester. I will keep all the grades as numerical values throughout the semester and assign a letter grade for the class at the very end based on the total weighted course score as described above. The letter grade assignment will be based on the ranked values of the total weighted scores computed for the course. The letter grades thresholds will be determined based on the distribution of these total course scores.

Projects

The projects for this class will be based on the Nachos educational operating system developed at UC Berkeley. To get you started, here is a supplemental chapter that introduces the Nachos system.

- Nachos chapter
 - URL: <ftp://ftp.aw.com/cseng/authors/silberschatz/OS5E/nachos.pdf>

I urge you to start reading this chapter in the next few of weeks.

OnCourse

All the communication in this class will be via OnCourse. I will post supplementary materials, grades, lecture slides, assignments, exam information and solutions, etc on OnCourse. In addition, OnCourse has email and class discussion forum capabilities that I will use to communicate with you. Everyone must make sure that they have access to OnCourse and read the messages at least once a day. If you are not yet registered or on waiting list, I will post the early materials (e.g., syllabus) to be accessible by the general

public. To access such materials use the guest login feature of OnCourse.

Cheating

1. The university policy on cheating can be found in the following link:
<http://www.hoosiers.iupui.edu/studcode/stucode.htm#part%203>.
2. **Bottom line:** *Your work in this class must be your own* - I will have a zero tolerance policy towards cheating of any kind and any student who cheats will get a failing grade in the course (and, I mean F in the course; not in the project, not in the exam, but in the course). This means:
 - o No copying of exams, projects, or any other material from your fellow students.
 - o No looking at your neighbors in exams.
 - o No searches on the internet (otherwise it wouldn't be your own work, would it?)
 - o No copying from my solutions distributed in the past semesters or programs written by other students in the past semesters. No copying from other students' work for the projects from past semesters.
 - o Anything else that makes what you present as your own to be not your own work.
3. After the exams are graded, the students can look at them, but may not take the original copy of the exam with them. They may take a photocopy of the exam. This is so that the exam is not modified and brought back for a regrade. (Believe it or not, I've had this happen, too, which is why this info is under the cheating section).

Student Responsibilities

Students are responsible for getting their work done on time, working independently and attending class. They are responsible not only for the reading material from the textbook, but also the material covered in lectures, including any materials that are not covered in the textbook but are covered in lectures. All class-work (including machine problems and examinations) is to be your own work.

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