

Comp 377 Operating Systems and Networks Spring 2011

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Office Hours: Monday 12:30 – 1:20, 2:30 – 3:20
 Tuesday 10:30 – 12:00, 1:30 – 3:00 *During these times I will try to always be in my office or nearby. You are also welcome any other time I'm in my office. Special appointments may be arranged as well.*
 Wednesday 12:30 - 1:20, 2:30 – 4:30
 Thursday By Appointment
 Friday 12:30 - 1:20, 2:30 – 3:20

Texts: Silberschatz, Galvin and Gagne, *Operating System Concepts*, 8th, Wiley, 2009
 Molay, *Understanding Unix / Linux Programming*, O'Reilly, 2003.

Objectives: To learn the internal structure of modern operating systems, what problems must be overcome by an operating system and some of the techniques that have been used to solve them. Upon completion of the course you should be able to discuss the internal components of most modern operating systems and apply your knowledge of these general concepts in learning the operation of new operating systems.

Structure: The class will consist of lectures/discussions and group activities. The material presented in class will overlap that of the text but will contain additions and variations.

We will have 2 exams during the course of the semester—a midterm and a final. We will also have 3 or 4 short quizzes; approximately one every three weeks. The quizzes and exams will be designed to reinforce your understanding of the material presented and discussed in class as well as evaluate your mastery of it.

As homework I will assign selected exercises from the text and occasionally from other sources. You will be given a short assignment almost every class. You will usually have one or two class periods to complete these.

You will also have several programming projects assigned during the semester. These will be designed to illustrate the problems that must be overcome in implementing some of the operating system concepts discussed.

Due dates for the assignments will be announced when they are given. Assignments must be turned in at the beginning of class on the day due. A penalty of 15% per class period will be assessed on late assignments.

Attendance: While you are not graded directly on attendance, you are expected to attend each class. Your attendance has a strong indirect impact on your grade. Also, your attendance will be used to boost your grade as follows. The attendance portion of your grade will be the percentage of classes for which you are actively present. This percentage will replace 5% of the lowest of the other four components. If you must miss a class for any reason, you are responsible for any material covered in your absence. If you must miss an exam or quiz, you will need to contact me before the period you miss to schedule a make-up.

Grades: Final grades will be based on the following percentages.

Midterm Exam	20 - 25 %
Final Exam	20 - 25 %
Homework Assignments	10 - 15 %
Programming Assignments	10 - 15 %
Quizzes	15 - 20 %
Attendance & Participation	5 %

Academic Dishonesty: Acts of dishonesty will be handled in accordance with SMSU's academic dishonesty policy as given in the student handbook. While you are encouraged to collaborate when working on homework assignments, you should not share your finished work with someone else nor ask someone else to share theirs with you.

Semester Schedule (Tentative)

<u>Topic</u>	<u>Approximate Dates</u>	<u>Text References</u>
I. Introduction and System Review	1/10 – 1/14	Chapter 1
II. OS Structures	1/19 – 1/28	Chapter 2
III. Processes	1/31 – 2/9	Chapter 3
Quiz 1	after Ch. 3	
IV. Threads	2/11 – 2/16	Chapter 4
V. Scheduling	2/18 – 2/28	Chapter 5
Quiz 2	after Ch. 5	
Mid-Term Exam	3/4	Chapters 1-5
Spring Break	3/7 – 3/11	
VI. Process Synchronization	3/14 – 3/21	Chapter 6
VII. Deadlocks	3/23 – 4/1	Chapter 7
Quiz 3	after Ch. 7	
VIII. Memory	4/4 – 4/18	Chapters 8 & 9
IX. Selected Topics	4/20 – 4/29	
Quiz 4	4/27	
Review — Course Wrap Up	4/29/14	

Final Exam:

The final exam period is scheduled for Wednesday, May 4, 2011 at 8:00 AM.

*The material covered for each topic, the exact nature of the assignments
and the pace of the course will
depend on the interest and progress of the class members.*