CS365: Operating System and Networking

Instructor: Prof. Yanwei Wu
CS Department, WOU

Winter, Spring

Course Objectives:

This course provides an introduction to Operating Systems as managers of systems resources and networking fundamentals. Management of tasks, memory, and peripheral devices is explored. Topics include task synchronization, message handling, scheduling, dispatching, network communications and protocols. Students gain hands-on experiences via labs and projects.

Prerequisite: CS 260 and CS271.

Outcomes:

Upon completion of the course, students will be able to:

- Explain the objectives and functions of modern operating systems.
- Describe the functions of a contemporary operating system with respect to convenience, efficiency, and the ability to evolve.
- Discuss networked, client-server, distributed operating systems and how they differ from single user operating systems.

General Information:

All handouts and important information will be posted or notified.

Teaching Personnel:

	Instructor
name	Yanwei Wu
office	ITC 310-D
phone	89121(O)
email	wuya@wou.edu

Time and Location:

Start Date	End date	Time	ClassRoom	Midterm	Final

Textbook:

TextBook: Operating System Concepts with Java By Abraham Silberschatz, Peter B. Galvin, Greg Gagne
Reference books:
Operating Systems Design and Implementation, 3/E, By Andrew S Tanenbaum, Albert S Woodhull
Modern Operating Systems, 4/E, By Andrew S. Tanenbaum, Herbert Bos
Papers and handouts will be posted on the course website or distributed in class.

Course Content:

Week1: Introduction

Week2: Operating-System Structure

Week3: Processes

Week4: Threads

Week5: CPU Scheduling

Week6: Process Synchronization

Week7: Deadlocks

Week8: Main Memory

Week9: Distributed System and Network Protocols

Week10: Student Presentation

Week11: Final Week

We will mainly cover the topics listed above. And we will try to cover some other topics if time permits and there are enough students who are interested.

Grading:

There will be homework (or labs), one presentation, one on-class midterm, and one on-class final exam. They will count toward the grade as follows:

Homework (or labs)(40%), Presentation (10%), Midterm Exam (20%), Final Exam (30%).

	100%-92%	A	91%-90%	A-		
	89%-88%	B+	87%-82%	B	81%-80%	B-
Final Grade:	79%-78%	C+	77%-72%	C	71%-70%	C-
	69%-68%	D+	67%-62%	D	61%-60%	D-
	59%-0%	F				

The instructor reserves the right for some small changes of grading. Any variation will be made for the benefit of students. Contact the instructor if there is still a disagreement.

Plagiarism:

In this course you are encouraged to discuss the problems with your classmates. However, you are not allowed to work together on the final solution of the problems except in a group project. If we find similar solutions, it will be treated as cheating! You get zero on the cheated assignment if you are caught once in any form of the cheating. In addition, the violation will also be reported to the division and the university.

Disability:

Please contact the Office of Disability Service if you need further help. The information of ODS is following:
http://www.wou.edu/student/disability/
Phone: 503-838-8250
Email: ods@wou.edu

NOTES:

1. The instructor reserves the right to adjust the class schedule and grading policy according to the class progress.
2. It is the policy of the computer science department that you must receive a passing grade on the final exam (60% or higher) in order to pass the class.
3. If you are going to miss the class, please ask the student affairs office to send me an email. Otherwise, no excuse is accepted.
4. Exams or quizzes must be taken at the times and dates scheduled unless you make other arrangements with me at least 24 hours prior to the exam or the quiz. There are NO makeup exams or quizzes!!
5. The final is NOT reschedulable.
6. Laptops or pads are not recommended to bring to the class since they are not necessary unless you present your work.