

CS360: Operating Systems

Fall 2013

Instructor: Terry Letsche

Office: SC 355 Phone: 352-8658

Office Hours: 14:30 – 15:35 MWF, 9:30 – 10:30 TH, and by appointment

E-mail: terry.letsche@wartburg.edu

Class Time: 9:00 – 10:05 SC 345

Textbook: Operating System Concepts *Essentials*, Silberschatz, 8/e

Textbook Website: <http://www.os-book.com>

Prerequisite: CS 220

Course Goals

At the conclusion of the course, the student will be able to:

- 1) Understand the functional subsystems of modern operating systems.
- 2) Appreciate the decisions and tradeoffs involved in OS design and be able to make intelligent decisions in selecting the systems and mechanisms that are most appropriate for a given task.
- 3) Understand the interplay of hardware, systems programs, and applications that create a useful computing environment.
- 4) Be able to apply their knowledge of OS structures to writing programs that utilize advanced features such as multi-processing, multi-threading, inter-process communication and synchronization, and distributed applications.

Tentative Course Schedule

Week of	M	W	F
9/2/13	Break	Ch. 1 Introduction	Ch. 1
9/9/13	Ch. 1	Ch. 2 Operating System Structures	Ch. 2
9/16/13	Ch. 2	Ch. 3 Processes	Ch. 3
9/23/13	Ch. 3	Ch. 4 Threads	Ch. 4
9/30/13	Ch. 5 CPU Scheduling	Exam 1	Ch. 5
10/7/13	Ch. 6 Process Synchronization	Ch. 6	Ch. 6
10/14/13	Ch. 6	Outfly	Ch. 7 Main Memory
10/21/13	Ch. 8 Virtual Memory	Ch. 8	Break
10/28/13	Ch. 8	Ch. 9 File-System Interface	Ch. 9
11/4/13	Ch. 10 File-System Implementation	Exam 2	Ch. 10
11/11/13	Ch. 11 Mass-Storage Architecture	Ch. 11	Ch. 12 I/O Systems
11/18/13	Ch. 12	Ch. 13 Protection	Ch. 13
11/25/13	Break	Break	Break
12/2/13	Ch. 13	Ch. 14 Security	Ch. 14
12/9/13	Ch. 14	Study Day	Final

Exam 3: Friday, December 13, 15:00

Grading

25% Exam 1 25% Exam 2 25% Exam 3

25% Case Study, Homework, Projects, Activities

Grading will be no more severe than 90/80/70/60.

PowerPoint Note

The PowerPoint presentations I use can serve as useful study guides. However, they do **not** replace, in any way, reading the text. Likewise, the problems from the end of the chapters are excellent resources for exam preparation.

Extra Credit

Students will have the opportunity to earn extra credit during the term. Extra Credit opportunities will be announced in class and on the class web site. Extra Credit is usually applied to the homework/project score, unless otherwise noted.

Late Work

Work received after the due time but less than 1 week late will receive 50% credit. After one week no credit is available. This policy will be bent only in extreme situations. It's the student's responsibility to ensure that work is completed on time, particularly if an absence is known about ahead of time.

Course Web Site

Students will use the Manhattan Virtual Classroom to learn about assignments and to submit work to be graded. To log in to this site, go to <http://socrates.wartburg.edu>. If you haven't used Socrates before, your login id is your first and last initials, followed by the last four digits of your id number. For example, if you are Joe Cool with id 000321, your login id will be jc0321. Your initial password will be the same.

Attendance

Regular attendance is expected. Although not part of the grade *per se*, excessive absences will affect a student's performance in the class and cannot help but have a detrimental impact on the instructor's attitude regarding the student.

Honor Code

As a matter of personal commitment, students, faculty, and staff of Wartburg College are expected to demonstrate three simple principles: 1) All work submitted be your own. 2) When using the work or ideas of others, including fellow students, give full credit through accurate citations. 3) Maintain academic honesty both on examinations and class assignments. If you are uncertain about the ground rules on a particular assignment, ask for clarification. All are responsible for abiding by these guidelines and opposing academic dishonesty by reporting any act that goes against these guidelines. Collaboration is an important part of the educational process. However, misrepresenting one's work by plagiarism or cheating can be grounds for a zero on that particular assignment or exam, up to failure of the class.

Special Needs

The Americans with Disabilities Act (ADA) provides protection from illegal discrimination for qualified individuals with disabilities. Students requesting instructional accommodations due to disabilities must arrange for such accommodations by contacting the Pathways Academic Success Associate Kelly Beck. Accommodations should be requested PRIOR to affected assignment due dates by contacting Beck in the Pathways Center, Vogel Library 321; calling (319) 352-8230; or e-mailing kelly.beck@wartburg.edu.