Fall 2013

CEG 4350/6350-01: OS Internals and Design

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CEG 4350/6350 OS Internals and Design

Fall semester, 2013

Objective: Introduction to basic concepts of operating systems, including process and thread management, CPU scheduling, process synchronization, memory management, file systems.

Instructor: Dr. Soon M. Chung
403 Russ Engineering Center
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http://www.cs.wright.edu/~schung

Class: Tu., Th. 3:30-4:50 pm at 125 Medical Science building

Office hour: M., Tu. 5:15-6:15 pm at 403 Russ, or by appointment.
Use e-mail for short questions.

Text Book: A. Silberschatz, P. Galvin, and G. Gagne, Operating System Concepts, 9th edition, John Wiley & Sons, 2013.

Reference Books:

K. A. Robbins and S. Robbins, Unix System Programming: Communication, Concurrency, and Threads, Prentice Hall, 2003.

John Shapley Gray, Interprocess Communication in Linux: The Nooks and Crannies, Prentice Hall, 2003.

Topics:

Processes (Ch. 3)
Threads (Ch. 4)
Process Synchronization (Ch. 5)
CPU Scheduling (Ch. 6)
Deadlocks (Ch. 7)
Main Memory (Ch. 8)
Virtual Memory (Ch. 9)
Mass-Storage Structure (Ch. 10)

Grading: A:[85,100], B:[75,85), C:[65,75), D:[55,65), F:[0,55)
Midterm 30% (10/17, Th.)
Final 40% (12/10, Tu., 2:45-4:45 pm)
Programming project 30% {design 8%, documentation 8%, correctness 8%, report organization and discussion 6%}