

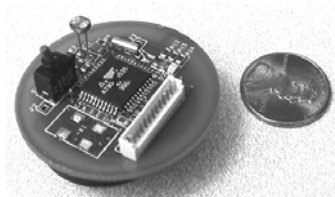
Operating Systems

ECE344

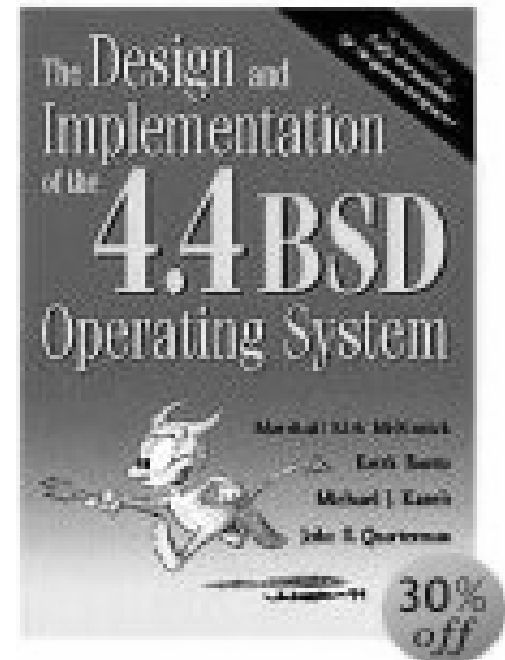
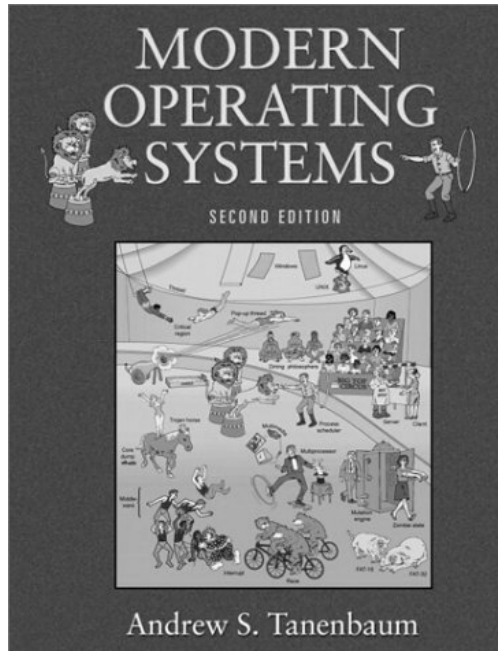
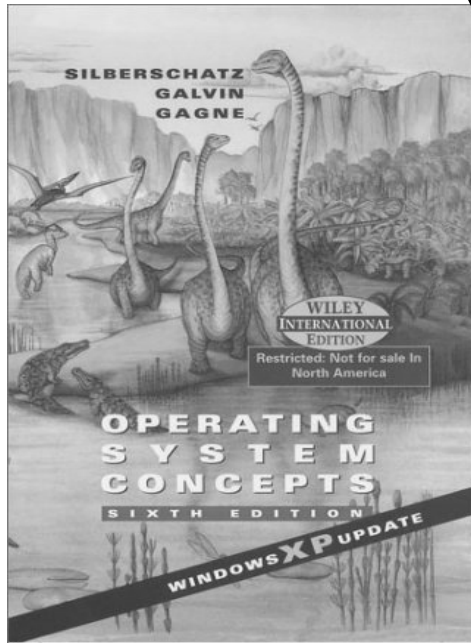
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Operating Systems Are Everywhere



Reading



Any recent edition is fine.

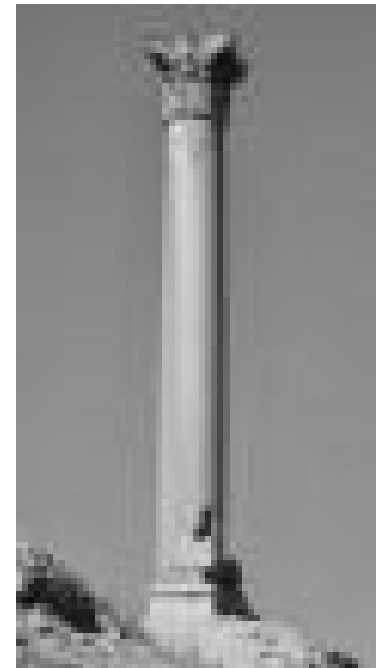
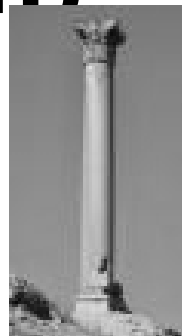
High-level Overview

- OS structure, system calls, processes, threads
- Synchronization
- Inter-process communication
- Scheduling
- OS architecture
- Memory management

- Lectures on assignments

What's the Take-away at the End of the Day

- General idea of what an OS is and what it involves
- Multi-threading and synchronization
- Memory management
- **Assignments (!!!)**



What this Course is Not About

- This course is not about Windows, Linux, any given system
- ... programming for Windows, Linux, ...

What this Course is About

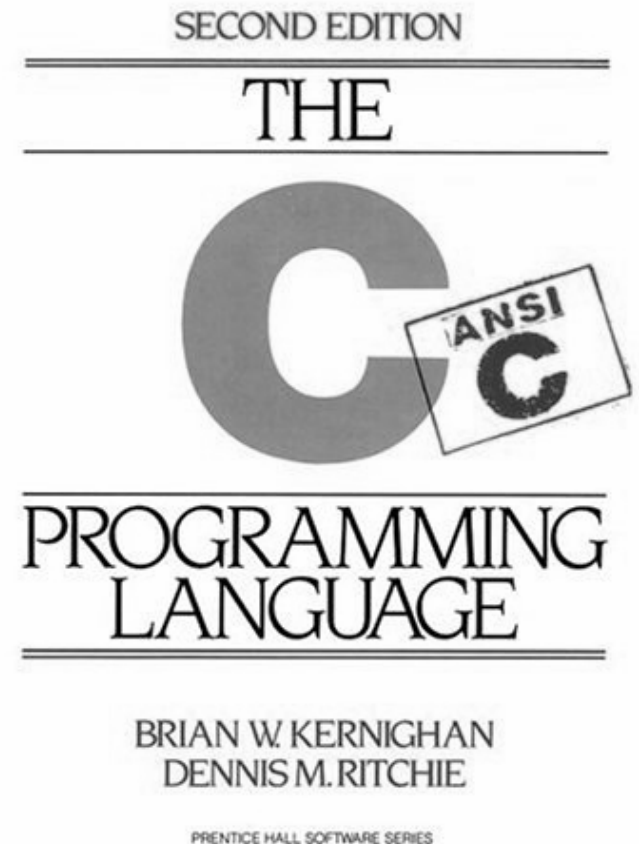
- The course takes a more general approach
 - looking under the hood of an OS,
 - abstracting from the details of a given system
 - presenting concepts and algorithms

How to Approach the Course

- The course material is *fairly simple*
- The assignments are *harder*
- That means focus on the assignments and work hard
- The course material will come to you easily

Assignments

- You need to know your tools
- C, emacs/vi, gcc, gdb, ...
- You will learn about
 - Large systems
 - OS/161
 - SYS/161



Assignment Infrastructure

OS / 161

Sys / 161

Solaris / Linux

ugsparc / ...

Labs will Go Live Next Week

- We may post labs and Assignment 0 prior to next week
- The learning curve is fairly steep, start reading and playing with the OS
- You may use it at home (you're on your own)
 - Linux
 - Cygwin/Windows
- At the end of the day things have to run on ugsparc