



Introduction to OS

Outline

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You are a Falcon !!

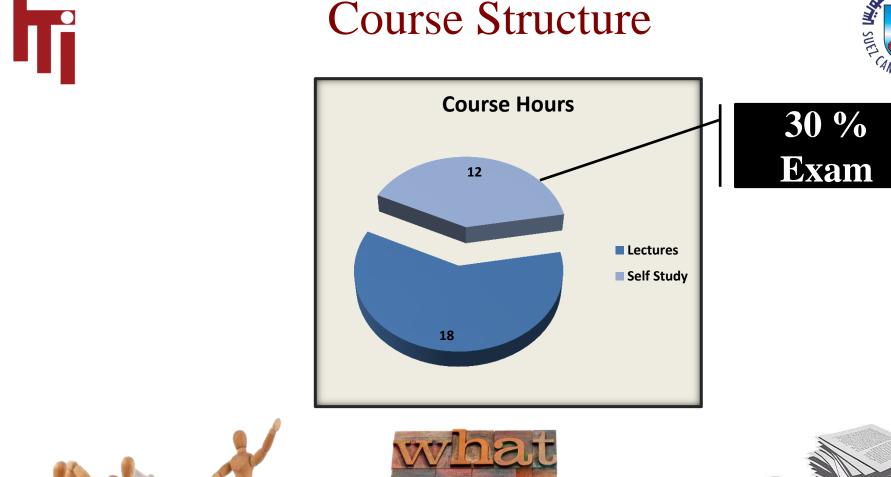






Course Structure













- Sat
- Thu
- Sat
- Thu
- Sat

Course Dates



18/10

- 23/10
- 25/10
- 30/10
- 1/11

8/11

• Sat



Self Study Objective



- Be familiar with Linux
- Online free course
 - https://courses.edx.org/courses/LinuxFoundationX/LFS101x/2T2014/
 - Very easy to manage
 - Chapter 1-5 $\rightarrow 23/10$
 - Chapter 6, 8-10 \rightarrow 30/10
 - Chapter 12, 13, 15 \rightarrow 8/11



• The first 30 min of the lecture is an oral quiz



Lecture Objectives



• Understand functions and structures of

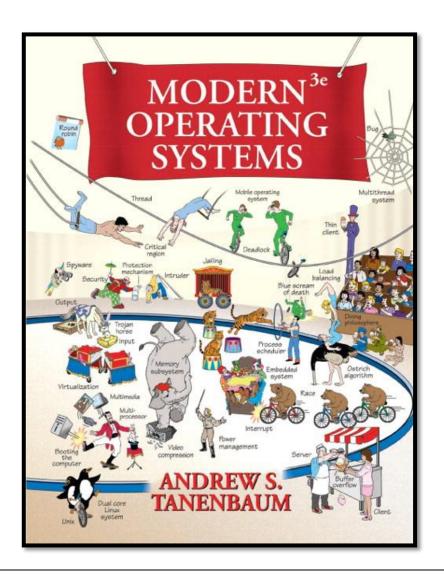
operating systems

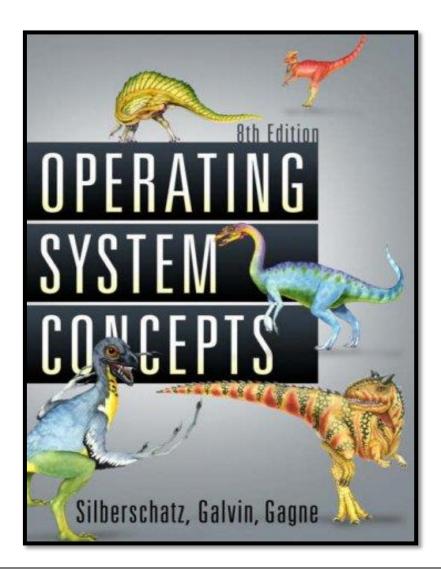
- Processes & Synchronization
- Memory Management
- File Systems
- Deadlocks



Course Books









- Prerequisites:
 - C/C++ programming
 - Especially a low-level language such as C
 - Data structures and Assembly Language will be great...!!
- Full Reading
 - Tanenbaum Chapter 1
- Take care of Quizzes









Ground Rule #1



- There are no "stupid" questions.
- It is a waste of your time and the class's time to proceed when you don't understand the basic terms.

• If you don't understand it, someone else probably doesn't it, either.



Ground Rule #2



- Help each other!
- It is a waste of your time try to figure out some obscure detail on your own when there are lots of resources around.
- When you have the answer, *write it in your own words* (or own coding style)



I don't have Linux !!!!











What is a Virtual Machine?

- An application that simulates a computer with enough fidelity and performance to mimic an actual hardware system
- Concept originated in 1960s, and has been used occasionally in large systems
- Established in mainstream of enterprise systems by *VMware* in early 2000s.



Virtual Machine Definitions

- *Host* system:- The hardware and operating system that supports the virtualization application
 - E.g., your own PC
- *Guest* system:- The virtual hardware and the operating system that is being simulated
 - E.g., Linuxmint for this course







- All materials you can download from here
 - <u>http://elgayyar.weebly.com/introduction-to-</u>

operating-system.html