

01219216 Operating System for Software & Knowledge Engineering

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Course Objective

The objective of this course is to make the student understand basic component and principle behind operating system with is one of the crucial part in modern computing system structure

After finish this course student must be able to:

- Identified key components of the operating system and how they interact with each other.
- Identify key algorithms and concept in operating system.
- Understand how memory, process, I/O are managed.
- *Be able to write some system program by yourself.*

Text

1. Silberschatz, Galvin, Gagne, "Operating System Concepts", ninth Edition, John Wiley, 2014.

web site: <http://os-book.com/>

Course Outline

Week	Date	Topics	Practice
1	1/16/2015	Operating System Overview	Linux Installation
2	1/23/2015	Operating System Structure	Basic command and program development
3	1/30/2015	Process Concept and Management	Basic command and program development
	2/6/2015	Break for Kaset fair	Process Control and Multithreading
4	2/13/2015	Process Scheduling	
	2/20/2015		Visit NARA
5	2/27/2015	Process Synchronization	Process Control and Multithreading
6	3/1/2015	DeadLock	Process Control and Multithreading
7	3/13/2015	Memory Management	Socket Programming
	3/20/2015	Midterm Exam	Process Synchronization in Linux
8	3/27/2015	Virtual Memory Management	Interprocess Communication
9	4/3/2015	File System	Interprocess Communication
10	4/10/2015	File System Implementation	Unix File and I/O
11	4/17/2015	I/O system	Unix File and I/O
12	4/24/2015	System Protection	Unix File and I/O
13	5/1/2015	System Security	Presentation
14	5/8/2015	Linux Design	Presentation
		Final Exam	

Grading

Midterm 30%

Final exam 40%

Project and Homework 30%