

KNU Course Syllabus (Name: Operating Systems Concepts)

Course Title	Operating Systems Concepts
Course Code	blank
Credits	3.0
Department	blank
Semester	2017S
Course Categories	blank
Instructor	Peter Peer
Hours	blank
Location	blank
Phone/E-mail	peter.peer@fri.uni-lj.si
Office Hours	blank
language	English

[ Syllabus ]

<p><b>Course Goals and Objectives</b></p> <p>The main objective of the course is to understand the purpose of the operating system in the computer system, its connection to hardware and user software. Students learn the concepts behind each crucial segment of the operating system: process, memory management, scheduling, and input/output management.</p>
<p><b>Textbook and other references</b></p> <p>William Stallings, Jurij Mihelič, Bojan Klemenc, <b>Peter Peer</b>, <i>Operating Systems Concepts</i>, Pearson, 2013.</p>
<p><b>Course Description, Methods, and Materials</b></p> <p>An operating system serves as the layer between our applications and hardware. It is a program that creates processes, schedules execution of processes, manages memory and input/output. We will look into the algorithms of all of these tasks in order to understand the concepts of operating systems and their interconnections.</p> <p>In general, the teaching style will focus on interactive presentation using demonstrations, discussions of content, in-class assignments, and short home assignments that are presented and discussed in class.</p> <p>Online handouts will be provided free of charge. No textbook is needed: the course will be build around the textbook, co-authored by the lecturer (given above).</p>
<p><b>Assignments, Grading Criteria, Prerequisite Subject</b></p> <p>Envisioned continuous assessment: mid-term exam (30%), final exam (30%), homework and</p>

in-class assignments (25%), class participation (15%).
The course is introductory, so no prerequisites are needed.
<b>Notice To Students</b>
Questions and discussions in class are very welcome.
<b>Academic Support for Students with Disabilities</b>
Additional explanations if needed after the lectures.

[ Course Lesson Plan ]

no	Course Goals and Objectives	Assignmen t	Text & Materials	Etc.
1	Computer systems overview		Handouts	
2	Operating systems overview		Handouts	
3	Process description		Handouts	
4	Process control		Handouts	
5	Threads		Handouts	
6	Concurrency: mutual exclusion, synchronization		Handouts	
7	Concurrency: deadlock and starvation		Handouts	
8	Mid-term exam			
9	Memory management		Handouts	
10	Virtual memory		Handouts	
11	Uniprocessor scheduling		Handouts	
12	Multiprocessor and real-time scheduling		Handouts	
13	I/O management and disk scheduling		Handouts	
14	File management		Handouts	
15	Final exam			

Cheating, plagiarism, and other dishonest practices will be punished as harshly as Kyungpook National University policies allow. The University specifies that cheating is grounds for dismissal. Penalties less severe may be imposed instead. A list of possible disciplinary actions is given below. Actions by the university:

- Failure in course
- Suspension from university for a designated period
- Expulsion from university