

CENG 334 - Intr. to Operating Systems

● Middle East Technical University
Department of Computer Engineering



Course Syllabus
Spring '2012-2013
Dr. Erol Şahin

- **Course Description:** The course will cover the following topics: Introduction to operating systems. Memory management. Process management. Concurrent processes. Deadlocks. Processor management. I/O and device management. File management and File systems. Introduction to distributed operating systems. Synchronization in distributed systems. Distributed file systems. Overview of contemporary OS technology.
Prerequisites: CENG331.
- **Instructor: Section 2, 3:** Dr. Erol Şahin
Location: B-111, Tel: 210 5539
E-mail: *erol@ceng*
Office hours: By appointment.
- **Teaching assistants:** Emre Işıklıgil (E-mail: *isikligil@ceng*) and Özcan Dülger (E-mail: *odulger@ceng*)
- **Schedule:**
Section 2: Tuesdays 10:40-12:30 (BMB3) and Thursdays 14:40-16:30 (BMB3).
Section 3: Tuesdays 13:40-15:30 (BMB5) and Wednesdays 10:40-12:30 (BMB5).
- **Textbooks:**
 - Operating System Concepts, by Silberschatz, Galvin and Gagne Wiley.
 - Modern Operating Systems, 3rd Edition, by Tanenbaum, Prentice Hall.

Both books should be available at the bookstore for a reasonable price.

- **Grading and MT dates:** The grading policy is listed below.

Midterm	30%	April 18, 2012
Assignments	30%	
Final	40%	to be announced

- **Communication:**
 - Course web page:
<http://kovan.ceng.metu.edu.tr/~erol/Courses/CENG334/>.
 - Announcements about the course will be made both in the CENG334 newsgroup <news://metu.ceng.course.334>, as well as on the course web page.
 - Questions that are general should be posted to the newsgroup. However, to avoid confusion please put *Section 2, 3* on the subject line of your posting.
 - If you have a specific question you can send an e-mail to the instructor or to your teaching assistant. However make sure that the subject line starts with *CENG334* [capital letters, and no spaces] to get faster reply.

- **Policies:**

- **Late projects:**

- * Late submission policy will be announced for each assignment.

- **Academic dishonesty:** All works submitted should be fully *your own*. We have a **zero tolerance** policy on cheating and plagiarism. Your work will be regularly checked for such misconduct and will be prosecuted. At all times you have the right to challenge our decisions on cheating, upon which the case will be processed through the disciplinary channels of the university. However, we would like to remind you that, if found guilty, the legal code of the university proposes a minimum of six month expulsion from the university.

- Course Schedule

	Week	Lecture	Notes
1	Feb 19, 2013	Introduction and OS Overview	
2	Feb 26, 2013	OS Overview and Processes	
3	Mar 5, 2013	Threads	
4	Mar 12, 2013	Synchronization	
5	Mar 19, 2013	Semaphores	
6	Mar 26, 2013	Monitors and Condition Variables	
7	Apr 2, 2013	Deadlocks	
8	Apr 9, 2013	Scheduling	
9	Apr 16, 2013	Scheduling	Midterm (April 18)
10	Apr 23, 2013	Memory Management and Virtual Memory	
11	Apr 30, 2013	Memory Management and Virtual Memory	May 1: Spring holiday
12	May 7, 2013	Disks and Filesystems	
13	May 14, 2013	Filesystems Interface	
14	May 20, 2013	I/O systems, multi-processor systems, virtualization and security	