CmpE 322 Operating Systems Fall 2015
Syllabus v1.0

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Class Meetings :   Wednesday   09:00-09:50   ETA-A2
  Thursday   15:00-16:50   ETA-A2
PS/Lab   Tuesdays   17:00-18:30   To Be Confirmed

Textbook: A. Silberschatz, P. B. Galvin and G. Gagne Operating System Concepts, John Wiley & Sons, 2014, 9th Ed. (2010 8th Ed. also OK)
Slides: http://codex.cs.yale.edu/avi/os-book/OS9/slide-dir/index.html

Grading :
  - Assignments+projects   200
  - Two midterms, 200+250   450
  - Final Exam   350   Total Exams : 80%
   Total   1000   Subject to change!

Subjects to be covered :
1. Introduction, evolution of operating systems, terminology, multiprogramming, time-sharing, computer and operating system structures, user and program interfaces (Chapters 1-2).
2. Process management : Concurrent processes, threads, process scheduling, process synchronization, critical section problem, semaphores, classical problems, monitors, atomic transactions, deadlock prevention, deadlock avoidance, deadlock detection and recovery (Chapters 3-7).
3. Memory management: Swapping, multiple partitions, paging, segmentation, virtual memory, page replacement algorithms (Chapters 8-9).
4. Storage management: File system interface. File system structures, allocation methods, free space management, file and directory implementation, disk structures and disk scheduling, I/O systems (Chapters 10-13).
5. Protection and Security: Access matrix and rights, capabilities, security issues (Chapters 14-15) (If time permits).
6. Case Studies (Chapters 16-18 and Appendices A & B, you keep on reading): Linux, Windows 7, Influential Operating Systems, BSD UNIX, The Mach System.
7. Problem/Lab sessions and project(s) are on MINIX.

Not all sections above will be lectured, you will study the related sections in the textbook and you are responsible for these sections

Exam Dates and Times :

1. Midterm 1 : November 5, 2015 Thursday 15:00-16:50
2. Midterm 2 : December 3, 2015 Thursday 15:00-16:50
3. Final Exam : As scheduled by the Registrar
    Note that you will NOT be allowed to take the Final Exam if the sum of your Midterm 1 and Midterm 2 grades is less than 50% of the sum of Midterm 1 and Midterm 2 full grades.

Additional Notes :
1. Drop this course if you did NOT successfully take its prerequisite CmpE 250 or its equivalent.
2. Your attendance is required in all classes and will affect your final grade.
3. No late projects will be accepted. Project deadlines are strict…!
4. You get zero if you miss an exam without official excuse.
5. The email list cmpe322@listeci.cmpe.boun.edu.tr will be used by all students and by the instructor for internal communications within this course.