

CS575 Operating System

Department of Computer Science
Metropolitan College
Boston University

Syllabus (General Information)

Instructor Information

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Course Information

Prerequisites:

[MET CS 472](#) and [MET CS 231](#) or [MET CS 232](#) or instructor's consent.

Text Book

Silberschatz, Galvin and Gagne. [*Operating System Concepts \(8th, update Edition\)*](#). John Wiley and Sons, Inc.

(Updated version includes windows 7. Any recent version is fine for this course).

or

Andrew S. Tanenbaum. Modern Operating Systems (3rd Edition). Prentice Hall.

or

William Stallings. Operating Systems, Internal and Design Principles (7th Edition). Prentice Hall.

Course Materials

Please check blackboard for all course materials. (<https://lms.bu.edu/>)

Description (from catalog)

Overview of operating system characteristics, design objectives, and structures. Topics include concurrent processes, coordination of asynchronous events, file systems, resource sharing, memory management, security, scheduling and deadlock problems. 4 credits.

Objectives

By the end of the course, the students are expected to:

- Understand the fundamental concepts of operating systems, including OS structures, processes/threads management, synchronization, deadlocks, memory management, file systems, disk and I/O, and security.
- Develop hands-on experience on basic UNIX-programming.
- Be introduced to the Linux kernel source code and possibly simple kernel-level programming.
- Develop system thinking skills.

Beside the general concepts of operating systems, Linux is mainly concerned as the case study. Android OS will also be discussed.

Besides the book chapters, the additional reading materials may be assigned for each topic. Students are responsible for ALL the materials covered including any topics not in the textbooks. Reading before and after class is required and essential to succeed in this course.

Course Requirements

- Class participation
- Reading and study
- Assignments (homework & project)
- Quizzes and Exam.

Course Polices

Grading Policy

The grade that a student receives in this class will be based on class participation, assignments, quizzes and final exam. The grade is breakdown as shown below. All percentages are approximate and the instructor reserves the right to make necessary changes.

- 7% on class participation
- 30% on assignments
- 8% on Review Exercises
- 20% on semester-long project
- 30% on final exam

Letter grade/numerical grade conversion is shown below:

A (95-100)	A- (90-94)	
B+ (85-89)	B (80-84)	B- (79-77)
C+ (74-76)	C (70-73)	C- (65-70)
D (60-65)	F (0 – 59)	

Attendance Policy

Attendance is expected at all class meetings. You are responsible for all materials discussed in class. In general, no makeup quizzes and exams will be given unless an extremely good, verifiable reason is given in advance. Please respect your classmates by silencing your cell phones and other electronic devices before class begins.

Assignment Late Policy

All assignments will be due at the start of class on the due date. The late assignments will be penalized within a week with **3% of your grade each day**. No assignments will be accepted one week after the deadline. It is the students' responsibility to keep secure backups of all assignments.

Assignment Format

All assignments should be named as CS575_<student's bu user name>_HW<number>.doc. Please include file name and page number in the header of the document. Please make sure the submission documents are in Word 2003/2007 format (**.doc**), that are **NOT** encoded in XML (**.docx**). The incorrect file name and format will be penalized with **5% of your grade**.

Academic Integrity

Academic conduct in general and MET College rule in particular require that **all references and uses of the work of others must be clearly cited**. All instances of plagiarism must be reported to the College for action. *For the full text of the academic conduct code, please check <http://www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code/>.*

Here is the brief description about plagiarism in the document: "Plagiarism. Representing the work of another as one's own. Plagiarism includes but is not limited to the following: copying the answers of another student on an examination, copying or restating the work or ideas of another person or persons in any oral or written work (printed or electronic) without citing the appropriate source, and collaborating with someone else in an academic endeavor without acknowledging his or her contribution. Plagiarism can consist of acts of commission appropriating the words or ideas of another-or omission failing to acknowledge/document/credit the source or creator of words or ideas (see below for a detailed definition of plagiarism). It also includes colluding with someone else in an academic endeavor without acknowledging his or her contribution, using audio or video footage that comes from another source (including work done by another student) without permission and acknowledgement of that source."