Course Syllabus
Queens College / City University of New York
Department of Computer Science
Operating Systems Principles
Spring 2020

INSTRUCTOR INFORMATION

Substitute Lecturer John Svadlenka
Office: Science Building A336
Office Hours: Mondays 12:15 - 1:15 PM and Thursdays 12:30 - 1:30 PM
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COURSE INFORMATION

Prerequisites: CSCI 220, 240, and 313
Lecture Time and Classroom as per Department Website:
https://www.cs.qc.cuny.edu/schedule/sp20/sp20.htm

Course Website (CUNY Blackboard) is available at:
https://www.qc.cuny.edu/StudentLife/services/online/Pages/Blackboard.aspx

TEXTBOOKS AND OTHER READING MATERIALS

Required: Operating System Concepts by Silberschatz, Galvin, Gagne 10th edition, Wiley, Enhanced ePub ISBN 978-1-119-32091-3
We will also refer to the required textbook's companion website at:
https://os-book.com/OS10/

COURSE DESCRIPTION *(from the Department Website)*

Principles of the design and implementation of operating systems. Concurrency, multithreading, synchronization, CPU scheduling, interrupt handling, deadlocks, memory management, secondary storage management, file systems. Programming projects to illustrate portions of an operating system.

COURSE GOALS

This course is intended to cover the major aspects in the design and implementation of operating systems. A secondary objective is to highlight those fundamental concepts with broader applicability beyond operating systems.

POLICY ON ACADEMIC INTEGRITY

Students are advised to review CUNY policies and procedures on academic integrity at the following link:
http://www2.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/academic-integrity-policy/

SPECIAL SERVICES FOR STUDENTS WITH DISABILITIES

Students with disabilities needing academic accommodation should contact the Office of Special Services in Frese Hall. For further information please see the following link:
https://www.qc.cuny.edu/StudentLife/services/specialserv/

COURSE TOPICS
We will cover the material given below.

Topic	TextBook Reading
Introduction and Operating Systems Structures	Chapters 1-2
Processes	Ch 3
Threads and Concurrency	Ch 4
CPU Scheduling	Ch 5
Synchronization Tools and Examples	Chs 6-7
Deadlocks	Ch 8
Main Memory	Ch 9
Virtual Memory	Ch 10
Mass Storage Structure	Ch 11
I/O Systems	Ch 12
File-System (selected topics as time permits)	Chs 13-15

GRADING
We will use the CUNY Blackboard for programming project submissions unless otherwise indicated in the lectures. Homework will be assigned but not graded. Programming projects comprise a major part of the course. Students are required to submit their own source code that is well-commented with compilation instructions, program output and write-up according to the instructor's directions.
The programming language for this course is C/C^{++} (Operating Systems are not written in $JAVA$). Students are also encouraged to participate in class discussions and to ask questions on the lecture topics to enhance their understanding of operating systems concepts. Course grade will be determined based upon the following components:

Component	Percentage of Grade	Comments
Programming Project 1	5%	Working Software and Write-Up
Programming Project 2	10%	Working Software and Write-Up
Programming Project 3	15%	Working Software and Write-Up
Programming Project 4	15%	Working Software and Write-Up
Midterm Exam	25%	Date TBD
Final Exam	25%	Date as per QC Final Exam Schedule
Class Participation	5%	