



OPERATING SYSTEMS

21:198:332 (3 credits)

COURSE DESCRIPTION:

This course presents the functions of a computer operating system and its implementation. Topics include process management, memory management, storage management and file systems. In addition to the conceptual foundations, students acquire practical experience by developing a systems program that illustrates key operating system concepts.

PREREQUISITE:

Data Structures & Algorithm Design (21:198:335)

TEXT BOOK: Silberschatz, Galvin and Gagne, Operating System Concepts, 9th Edition, Wiley

ISBN: 978-1-118-06333-0

DEPARTMENT WEBSITE: <http://www.ncas.rutgers.edu/math>

THIS COURSE COVERS THE FOLLOWING:

Chapter 1:

1.1 to 1.11 Introduction

Chapter 2:

2.1 to 2.10 Operating System Structures

Chapter 3:

3.1 to 3.6 Process Management

Chapter 4:

4.1 to 4.7 Threads

Chapter 5:

5.1 to 5.9 Process Synchronization

Chapter 6:

6.1 to 6.8 CPU Scheduling

Chapter 7:

7.1 to 7.7 Deadlocks

Chapter 8:

8.1 to 8.8 Main memory

Chapter 9

9.1 to 9.7 Virtual memory

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