

SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS

COSC 450 Operating System

Prerequisite: COSC 350 System Software with a grade of C or better

Description: Understanding the role and purpose of the operating system, functionality of a typical operating system and algorithms employed by operating systems. Three hours lecture per week.

References:

- Operating System Concepts 10th Edition by Siberschatz, John Wiley & Sons 2019.
- Modern Operating Systems 4th edition by Andrew S. Tanenbaum, Prentice Hall 2014

Main Topics:

- Introduction to Operating System
- Process & Thread Management
- Memory Management
- File Management
- Deadlock Management
- Input /Output Device Management

Extra Topics:

- Multimedia Operating System
- Multiple Processor Operating Systems
- Virtualization and The Cloud

Grade: Test 1- 20 %, Test 2 – 20 %, Final – 30 %, Mini Test – 30 %. Your final grade will be based on the standard formula

- **A:** $90 \leq \text{Total_Average_score}$
- **B:** $80 \leq \text{Total_Average_score} < 90$
- **C:** $70 \leq \text{Total_Average_score} < 80$
- **D:** $60 \leq \text{Total_Average_score} < 70$
- **F:** $\text{Total_Average_score} < 60$

Exam Policy:

- There will be an announcement one week before each exam (midterm, mini-test or final exam).
- There will be no make-ups or rescheduling of exams for individual cases (except emergency cases with evidence).

Attendance: Each student is expected to be present each lecture. Attendance will be checked for each class. If a student misses lectures more than 6 times (2 weeks) without any reason with evidence, he/she will lose 3% from the total average score. If a class must be missed, however, students are responsible for all material, assignments, and announcements made during class.