Course Syllabus

Course CS 4440

number

Course name Introduction to Operating Systems

Credits 3 units

Contact hours 31

3 hours/week

Text book Course

Information

a) Catalog Description: Resource, memory and process management; concurrent processing; networking and distributed systems. Lecture 4 hours.

b) Required/Elective: This course is required in the BS program.

Course Goals

The Student Learning Outcomes that are addressed by the course are:

SLO #4. Students will have a fundamental understanding of computer systems.

Other outcomes of instruction:

At the end of the course, students are able to

- Familiar with the main concepts of modern Operating Systems
- · Familiar with interrelationships among users and hardware components
- · Familiar with process and threads management
- · Familiar with CPU scheduling,
- Familiar with process synchronization and deadlocks handling
- · Familiar with memory management and storage management

Brief list of topics to be covered

- 1) Introduction to Operating System
- 2) Overview of the operating system components
- 3) Operating system Structures
- 4) Process Management
- 5) Processes
- 6) Threads
- 7) CPU Scheduling
- 8) process Synchronization
- 9) Deadlocks
- 10) Memory Management
- 11) Basic Memory Management
- 12) Virtual Memory Management
- 13) Storage Management
- 14) File System Interface

- 15) File System Implementation
- 16) Mass Storage Structure
- 17) I/O Systems

Laboratory Projects

No lab component for this course

Grading Policy

$$x >= 95 A$$

$$80 \le x \le 83 B$$
-

$$74 \le x \le 76 \text{ C}$$

$$70 \le x \le 73 \text{ C}$$

$$<= 59 F$$

Academic Integrity

Cheating will not be tolerated. Cheating on any assignment or exam will be taken seriously. All parties involved will receive a grade of F for the course and are reported to the proper authorities.

ADA Statement

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.