

Faculty of Computing and Information Technology

Department of Computer Science

Spring 2018

CPCS-462 Syllabus

Catalog Description

Computing Accreditation Commission

CPCS-462 Operating Systems (II) Credit: 3 (Theory: 3, Lab: 0, Practical: 0) Prerequisite: CPCS-361 Classification: Elective

The objective of this course is to familiarize students with the modern alternative operating models such as distributed processing, parallel processing, and real-time processing. Topics include virtual memory, thread scheduling, Security systems and their requirements, shared security systems, performance quality, system reliability, system failure, pre-failure warning, and system recovery.

Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week Lab/Tutorial 90 minutes 1 times/week

Textbook

Grade Distribution

Week	Assessment	Grade %

Topics Coverage Durations

Topics	Weeks				
Virtual memory	1				
Thread scheduling					
Distributed, parallel and real-time processing					
Security systems and their requirements					
Shared security systems	3				
Performance quality and system reliability					
System failure	1				
Pre-failure warning	1				
System recovery	1				

Last Articulated

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j	k
x	х	х								

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

- 1. To be familiar with modern operating systems. ()
- 2. To know the requirements of real-time operating systems. ()
- 3. To know the requirements of distributed and parallel operating systems. ()
- 4. To be able to measure system performance. ()
- 5. To be able to optimize and improve system performance. ()
- 6. To know how to protect operating systems. ()
- 7. To know how to perform system recovery. ()

Coordinator(s)