

Faculty of Computing and Information Technology

Department of Computer Science



Spring 2018

CPCS-464 Syllabus

Catalog Description

CPCS-464 Dependable Computing

Credit: 3 (Theory: 3, Lab: 0, Practical: 0)

Prerequisite: CPCS-463 **Classification:** Elective

The objective of this course is to acquaint students with the high-reliability computer systems used in fault intolerant critical applications. Topics include computing systems security, applications that require high-quality computer systems, mobile client system, various security protocols, multi-distribution system, breach discovery and prevention, wireless networks reliability measurement, and ensuring the quality of service.

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
Introduction to computing systems security	2
Applications that require high-quality computer systems	2
Mobile client system	2
Security protocols	2
Multi-distribution system	2
Breach discovery and prevention	2
Wireless networks reliability measurement	1
Ensuring the quality of service	1

Last Articulated

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j	k
X	X							X		

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

- 1. To understand the requirements of software systems. ()
- 2. To understand the concept of dependability. ()
- 3. To be familiar with the criteria for dependability. ()
- 4. To be familiar with the criteria for dependable hardware. ()
- 5. To be familiar with the criteria for dependable software. ()
- 6. To be able to determine the significance of dependability for various applications. ()

Coordinator(s)