

### **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							
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)