

**Faculty of Computing and Information Technology** 



Department of Computer Science

Spring 2018

# **CPCS-466 Syllabus**

## **Catalog Description**

CPCS-466 Systems Programming Credit: 3 (Theory: 3, Lab: 0, Practical: 0) Prerequisite: CPCS-361 Classification: Elective

The objective of this course is to explore the design, development, and operation of system applications. Topics include the difference between system software and application software in terms of development features and area of application, file systems, permanent and temporary storage systems, assembly compiler, high-level languages, application setup, memory management system, and processes carried out under the operating systems.

#### **Class Schedule**

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

### Textbook

Hart, Johnson M., , "Windows system programming", Addison-Wesley; 4 edition (2010)

**ISBN-13** 9780321657749 **ISBN-10** 0321657748

### **Grade Distribution**

Week

Assessment

Grade %

### **Topics Coverage Durations**

Topics	Weeks
Difference between system software and application	2
software in terms of development features and area of	
application	
File systems	2
How to manipulate with file systems?	1
System call	1
Permanent and temporary storage systems	2
Assembly compiler	1
High-level languages compiles	1
Application setup	1
Memory management system and processes carried out	2
under the operating systems	
Service provider	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 know system applications. ()
- 2. To be able to identify system applications. ()
- 3. To understand the relationship between hardware and software. ()
- 4. To be familiar with the methods of programming certain components of the operating system. ()
- 5. To be familiar with the methods of building compilers. ()

### **Coordinator(s)**