# **Introduction to PC Operating Systems (ITSC 1305)**

**Credit:** 3 semester credit hours (3 hours lecture, 0 hours lab)

Prerequisite/Co-requisite: None



# **Course Description**

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.

## Required Textbook and Materials.

- 1. Guide to Parallel Operating Systems with Windows 7 and Linux, 2nd Edition, Carswell, Ron, Shen Jiang, and Terrill Freese. Course Technology, Cengage Learning, 2012. ISBN 978-1-111-54370-9.
- 2. 64 GB or greater personal storage device for course work (USB flash drive or portable hard drive)
- 3. Internet access

## **Course Objectives**

Upon completion of this course, the student will be able to:

- 1. Install, configure, and maintain the operating system.
- 2. Perform basic file management operations.
- 3. Organize and allocate primary and secondary storage.
- 4. Access and control peripheral devices and run utilities.

#### **Course Outline**

- A. Hardware Components
  - 1. Virtual Machine Technology
  - 2. Hardware Components of a PC System
  - 3. Peripheral Devices
  - 4. Preventive Maintenance
  - 5. Connecting Components and Testing a PC
- B. Software Components
  - 1. Common Operating Systems
  - 2. Common Operating System Architectures
  - 3. Functions of an Operating System
  - 4. OS Interaction

- 5. System Utilities
- 6. Applications
- C. Using the Graphical User Interface
  - 1. Using the Start Menu and Applications Menu
  - 2. Tailoring the Desktop
  - 3. Accessing Data on Your Computer
- D. Installing and Configuring Applications
  - 1. Accessing the Help Features
  - 2. Using and Configuring Web Browsers
  - 3. Installing an Application

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### E. File Systems

- 1. Windows 7 File System Characteristics
- 2. Fedora 13 File System Characteristics
- 3. File System Creation
- 4. Mounting a File System
- 5. Managing File Systems

### F. Directory Commands

- 1. Directory Structures
- 2. Displaying Directory Structures
- 3. Navigating the Directory Structure
- 4. Working with Directories
- 5. Working with Files
- 6. Using Removable Drives for Application Data Storage

#### G. Files and File Attributes

- 1. Contents of Files
- 2. Using File Attributes
- 3. Finding Files

### H. Text Editors

1. Overview of Common Text Editors

### **Grade Scale**

90 - 100	A
80 - 89	В
70 - 79	C
60 - 69	D
0 - 59	F

### 2. Working with Files

- 3. Working with Lines of Text
- 4. Searching for Text Strings
- 5. Searching and Replacing Text Strings

#### I. The Command Line

- 1. Features of Command-Line Interpreters
- 2. Accessing Help for Commands
- 3. Displaying the Contents of Files
- 4. Creating Script Files

## J. Operating System Management

- 1. Managing Tasks
- 2. Monitoring Performance
- 3. Monitoring Reliability

### K. Networking

- 1. Networking Terminology
- 2. Viewing TCP/IP Settings
- 3. Accessing Network Resources
- 4. Folder and File Sharing Permissions

#### **Course Evaluation**

Final grades will be calculated according to the following criteria:

1.	Lab Activities	30%
2.	Chapter Review Questions	10%
3.	Tests	30%
4.	Final Exam	30%

## **Course Requirements**

- 1. Demonstrate proficiency through hands-on lab activities as assigned.
- 2. Complete Chapter Review Questions as assigned.

### **Course Policies**

- 1. No food, drinks, or use of tobacco products in class.
- 2. Cellphones, MP3 players, tablets, notebook/netbook(s) and any other electronic devices must be turned off while in class.
- 3. Do not bring children to class.
- 4. No late assignments will be accepted. Any assignment submitted after the Blackboard cut-off time will result in a '0'.
- 5. **Tests:** Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.
- 6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
- 7. A grade of 'C' or better must be earned in this course for credit toward degree requirement
- 8. All assignments will be completed using Blackboard. Assignments may not be submitted via email.
- 9. **Attendance**: Students should be present and punctual for all classes. Any assignment missed due to absence will result in a zero.
- 10. **Tardiness**: If tardy, enter quietly and do not disturb the class. Students that are tardy or miss a class are responsible for all work and/or discussion missed. The student is responsible to obtain missed material from a classmate. **Do not expect your instructor to repeat a lecture and do not interrupt your instructor.**
- 11. Do not talk, type, or print while the instructor is talking to the class or when a student is asking a question that pertains to the class.
- 12. Refrain from "surfing" the Web during class, unless directed by your instructor.

#### **Disabilities Statement**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

## **Course Schedule**

Refer to Blackboard for actual assignments and due dates

Week of	Topic	Reference
Week 1	Syllabus and policies	Syllabus
Week 2	Setup; Hardware Components	Chapter 1
Week 3	Hardware Components	Chapter 1
Week 4	Software Components	Chapter 2
Week 5	Using the Graphical User Interface	Chapter 3
Week 6	Installing and Configuring Applications	Chapter 4
Week 7	File Systems	Chapter 5
Week 8	Directory Commands	Chapter 6
Week 9	Files and File Attributes	Chapter 7
Week 10	Files and File Attributes	Chapter 7
Week 11	Text Editors	Chapter 8
Week 12	The Command Line	Chapter 9
Week 13	The Command Line	Chapter 9
Week 14	Operating System Management	Chapter 10
Week 15	Networking	Chapter 11
Week 16	Review for Final Exam	

# **Contact Information:**

**Instructor:** Bonnie Cobb

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**Office Hours:** W 11:15 a.m. to 12:15 p.m.

R 10:00 a.m. to 11:00 a.m.