**I. COURSE TITLE:** Operating Systems

 **COURSE NUMBER:** 1150 **COURSE PREFIX:** EENG

**II. PREREQUISITE(S):** None

**III. CREDIT HOURS:** 3 **LECTURE HOURS:** 2

 **LABORATORY HOURS:** 1 (2 contact hours) **OBSERVATION HOURS:** 0

**IV. COURSE DESCRIPTION:**

 This course is designed to introduce the student to various types of computer operating systems. It will familiarize the student with the basic commands and fundamental concepts needed to work in these systems. We will discuss single user, multitasking and multi-user systems along with user interfaces. Students cannot receive credit for both CSCI 1150 and EENG 1150.

**V. ADOPTED TEXT(S):**

 *A+ Guide to Software – Managing, Maintaining and Troubleshooting*

 9th edition, 2016, Cengage

By: Jean Andrews

ISBN: 978-1-305-26650-6

A+ Guide to Software Lab Manual

9th edition, 2016, Cengage

By: Jean Andrews

ISBN: 978-1-305-26656-8

**VI. COURSE OBJECTIVES:**

This course maps fully to CompTIA’s new 2009 A+ Exam objectives. The course is designed to be a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer software.

* Understand the requirements for the CompTIA Exams
* Install operating systems
* Protect, maintain and optimize Windows
* Understand support terminology for Windows 2000, XP and Vista
* Understand how to troubleshoot and repair Windows installations
* Describe how to secure a PC and LAN
* Describe how to install printers and scanners
* Note characteristics of a professional PC technician
* Understand Windows on a Network
* Understand best security practices and procedures

**VII. COURSE METHODOLOGY:**

Methodology can include hands-on labs, exercises, demonstrations, lectures, presentations, group activities, research papers, quizzes and exams.

**VIII. GRADING:**

 Grading will follow the policy in the SSCC catalog.

 A = 90 – 100

 B = 80 – 89

 C = 70 - 79

 D = 60 - 69

F = 0 – 59

**IX. COURSE OUTLINE/SAMPLE COURSE CALENDER:**

**Chapter 1 Introducing Operating Systems – Week 1**

1. Operating Systems Past and Present
2. How Windows 2000/XP/Vista Works
3. Using Windows 2000/XP/Vista

**Chapter 2 Working with People in a Technical World – Week 2**

1. Job Roles and Responsibilities
2. What Customers Want
3. Planning for Good Service

**Chapter 3 Installing Windows – Week 3**

1. How to Plan a Windows Installation
2. How to Install Windows Vista
3. How to Install Windows XP

**Chapter 4 Maintaining Windows – Week 4**

1. Schedules Preventive Maintenance
2. Back-Up Procedures
3. Managing Files, Folders, and Hard Drives

**Chapter 5 Optimizing Windows – Week 5 and 6**

1. Windows Utilities and Tools
2. Improving Windows Performance
3. Monitoring the Startup Process

**Chapter 6 Tools for Solving Windows Problems – Week 7 and 8**

1. Tools to Help with Blue Screen Errors
2. Vista Tools for Solving Startup Problems
3. Windows 2000/XP Tools for Solving Startup Problems

**Chapter 7 Fixing Windows Problems – Week 9 and 10**

1. Fixing Problems Caused by Hardware
2. Fixing Problems Caused by Applications
3. Troubleshooting Vista Startup
4. Troubleshooting Windows 2000/XP Startup

**Chapter 8 Networking Essentials – Week 11 and 12**

1. Windows on a Network
2. Connecting a Computer to a Network

**Chapter 9 Networking Practices – Week 13**

1. Connecting to the Internet
2. Setting Up a SOHO Networks
3. Tools and Utilities for Supporting and Troubleshooting Networks
4. Troubleshooting Network and Internet Connections

**Chapter 10 Security Essentials – Week 14**

1. Comply with Security Policies
2. Controlling Access to Secured Resources
3. Additional Methods to Protect Resources

**Chapter 11 Security Practices – Week 15**

1. Controlling Access to Computer Resources
2. Dealing with Malicious Software

**Final Exam**

\*\* Instructor reserves the right to organize work to meet the objectives of the course

**X. OTHER REQUIRED SOFTWARE, BOOKS AND MATERIALS:**

A web connection is required for access to the Cengage Lab Connection software.

http://www.labconnection.net

**XI. EVALUATION:**

* Instructor will specify which criteria apply to a particular assignment.
* Students will complete multiple exercises using the appropriate operating system software.
* Other assignments, projects and exercises may be assigned and graded at the discretion of the instructor.
* Students will reflect mastery of course material thru periodic tests, quizzes and exams.

**XII. SPECIFIC MANAGEMENT REQUIREMENTS:**

 At the discretion of the instructor

**XIII. OTHER INFORMATION:**

**FERPA:** Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes.

Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

**DISABILITIES:** Students with disabilities may contact the Disabilities Service Office, Central Campus, at 1-800-628-7722 or 937-393-3431.