COURSE DESCRIPTION

CPMT 1451

Prerequisite: None

An introduction to information technology and data communication. Includes topics on personal computer hardware and software and basic networking concepts.

This is a 4 credit course. (3 lec., 4 lab.)

WECM END-OF-COURSE OUTCOMES: Describe the internal components of computer hardware and an introduction to advanced concepts.

ITSC 1425

Prerequisites: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by instructor.

Current personal computer hardware including assembly, upgrading, setup, configuration and troubleshooting.

In this course, we will take an in-depth look at some advanced computer maintenance concepts and techniques. We will examine theoretical concepts that make the world of technology unique. Also, this course will adopt a practical hands-on approach when examining PC development techniques. Along with examining different troubleshooting strategies, this course will explore the advancement of technological development, as well as, timeless problem solving strategies.

WECM END-OF-COURSE OUTCOMES: Assemble/setup and upgrade personal computer system; diagnose and isolate faulty components, optimize system performance; and install/connect peripherals.

This is a 4 credit course. (3 lec., 3 lab.)
STUDENT LEARNING OUTCOMES:

Upon successful completion of CPMT 1451 IT Essentials I: PC Hardware and Software and ITSC 1425 Introduction to PC Hardware, the student will be able to:

- Work in teams to identify components of a personal computer system
- Utilize research tools and prepare specifications for a personal computer system
- Evaluate strengths and weaknesses of various components
- Interface with various peripheral devices
- Maintain and troubleshoot system problems
- Write a one page research paper summarizing communication skills needed to deal with customers.

COURSE MATERIALS

Required textbook:  **A+ Bundled (2009 A+ Essentials and A+ Practical Applications), Testout, 2010** (ISBN # 978-1-935080-39-8 from Testout  www.testout.com) You will need to email your instructor or go to eCampus on your Announcement page for the course for the special PROMOTIONAL code that allows students to purchase the product at student prices of $125.00. Instructions on how to install and enroll in the class will be provided in the email and on the Announcements page. Note- Follett Bookstore will offer the product at a different price than the online vendor website.

Curriculum available online (Cisco Networking Academy Website)- your instructor will provide logon and temporary passwords via email.

Optional Textbook:  **IT Essentials Course Booklet: PC Hardware and Software, Version 4.0, Cisco Networking Academy, Cisco Press, 2010. ISBN# 978-1-58713-252-0** This is available online free to students in this course.

Curriculum available online

Toolkit
Email Address

A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Major Course Requirement
Students will participate in Discussion Board addressing topics in each chapter.
Students will complete the review questions in each chapter.
Students will complete an assigned case study Exercise from each chapter.
Students will produce a Case Study Project paper.
Students will complete LabSim Certification Practice Exam

A mid-term and final exam will evaluate the student's understanding of the fundamentals of Information Technology Essentials.

**Subject Matter**
Topics covered in the lecture portion of the course include:
- Introduction to the Personal Computer
- Safe Lab Procedures and Tool Use
- Computer Assembly Step-by-Step
- Basis of Preventive Maintenance and Troubleshooting
- Fundamental Operating Systems
- Fundamental Laptops and Portable Devices
- Fundamentals Printers and Scanners
- Networks
- Security
- Communications Skills

**Disclaimer**
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

**Policies**
Students should click on the links below and read all of these policies.

[General institutional policies](#)
[Course-related institutional policies](#)