COURSE OUTLINE

DIVISION: Information Technology
CURRICULUM: Information Technology (core)
COURSE TITLE: INTRODUCTION TO COMPUTER HARDWARE
COURSE NUMBER: ITC 140
CREDITS: 5
TYPE: Professional Technical
LENGTH: One quarter
PREREQUISITES: MIC 101, OR CIS 102 or instructor permission.
COURSE DESCRIPTION: This course is designed to provide a basic understanding of various hardware components. Hands-on experience in installation and configuration is included. Students learn how software interacts with and controls the computer’s hardware elements. Analytical logic and troubleshooting skills are emphasized. Basic networking concepts are introduced.

COURSE OUTCOMES:

After completing this course students will
♦ Understand how PC hardware operates.
♦ Understand how PC peripherals interact with PC hardware.
♦ Understand basic network hardware concepts.
♦ And will be able to
  Install and configure PC components.
  Use PC troubleshooting techniques
  Set up basic local area networks.


Required Materials: A standard size Phillips screwdriver
Methods of Instruction: Labs(hands on), Handouts, Demonstration, Lecture
Student Assignments: Labs, quizzes, group project, midterm, and final. The midterm and final will be part written exam and part hands on.

TOPICAL OUTLINE:

♦ The Big Picture, How Almost Any Computer Works,
♦ First Look Inside Your PC.
♦ Computer Language. Debug, Microprocessors.
♦ Memory. Registers. Interrupts.
♦ Disk drives.
♦ Input devices and displays. Input/Output devices and Modems.
♦ Networking, terminal emulation, and Internet hardware.
♦ Introduction to troubleshooting
♦ Advanced troubleshooting.