I. VERNON COLLEGE GENERAL EDUCATION PHILOSOPHY STATEMENT

General education at Vernon College reflects the institution’s deep conviction that successful, satisfying lives require a wide range of skills and knowledge. We are dedicated to providing educational opportunities that develop the academic, career, and personal capabilities of individuals so they may achieve self-fulfillment and participate fully and positively in a democratic society. Vernon College has identified the following college-level competencies generated from the general education core:

GENERAL EDUCATION CORE COMPETENCIES

A. Critical Thinking: Students will evaluate the validity of their own and others’ ideas through questioning, analyzing, synthesizing, and evaluating results into the creative process.

B. Communication/Interpersonal: Students will develop effective reading, writing, speaking, and listening skills to communicate verbally and nonverbally.

C. Scientific and Mathematical Literacy: Students will apply an understanding of mathematical, natural, and behavioral scientific principles and methods to solve abstract and practical problems.

D. Information Literacy: Students will develop the information literacy skills to confidently and competently locate, use, and evaluate information.

E. Cultural Literacy: Students will develop an appreciation of human culture and its diversity and the role of the creative arts in society.

II. CATALOG DESCRIPTION:

An introduction to information technology and data communication. Includes topics on personal computer hardware and software and basic networking concepts. Lab Fee: $24.00; Special Fee: $37.00; Internet Enrollment Special Fee: $60.00

III. REQUIRED BACKGROUND:

ITNW 1325 or Consent of instructor. A background in computer hardware, integration, and networking would be beneficial.
IV.  TEXTS, OTHER REFERENCE MATERIALS:

Digital MultiMeter (Bookstore) 978-0-619-13101-2
Cable Tester (Bookstore) 978-0-619-21738-9
Toolkits/w Strap (Bookstore) 978-0-619-01655-5
LabSim Testput Software 220-701/220-702 (Bookstore)

Materials Required: USB Flash Drive required as well as Toolkits and testers for computer maintenance and A+ Certification for the delivery of the course as needed by the instructor.
Additional tools/materials required for the delivery of the course content as required by the instructor (letter of request may follow).

V.  METHOD OF INSTRUCTION:

This curriculum will consist of various terminologies and hands-on labs as well as practice exams and lectures as needed. Upon completion of the assigned chapter exercises, each student will take a chapter exam.

Course content can be delivered as in-class environment or as a Hybrid class.

Students desiring auxiliary aids and services for this course should make their requests to the instructor and the Special Services Director.

VI.  COURSE CONTENT:

IT Essentials I: PC Hardware and Software will introduce students to information technology and data communications. Students will develop the necessary skills to enter this field by building a computer, installing the operating system, adding peripherals, connecting the computer to a local area network and to the Internet. This is a hands-on, lab-oriented course that stresses laboratory safety and working effectively in a group environment. This course will help prepare students for CompTIA's A+ certification exam. Licensing/Certifications Agency: Cisco.

Students desiring auxiliary aids and services for this course should make their requests to the instructor and the Special Services Director.

VII.  LEARNER OUTCOMES
COURSE NUMBER AND TITLE: CPMT 1405 IT Essentials I: PC Hardware and Software

Upon completion of the course, each student should be able to do the following:

A. Build a Computer (SCANS V-A, B, C, & D)
B. Install field replaceable modules: (SCANS V-C, VII-C)
   1. Mother boards
   2. Floppy drives
   3. Hard-drives
   4. CD/DVDROM drive
   5. Video Cards
   6. Network interface cards
C. Install and manage operating systems: (SCANS VII-C)
   1. Windows
   2. Linux
D. Add peripherals and multimedia capabilities (SCANS VI- B, C)
E. Demonstrate knowledge of local-area network architecture (SCANS III-D)
F. Demonstrate knowledge of network protocols (SCANS III- A, B, C, D)
G. Demonstrate knowledge of the OSI Model (SCANS IV-C)
H. Demonstrate knowledge of TCP/IP utilities (SCANS IV – A, VI-C)
I. Demonstrate ability to connect the computer to a local area network and to the Internet. (SCANS VI-C)
J. Demonstrate the knowledge of safety and preventive maintenance. (SCANS VI-B)
K. Demonstrate knowledge of specific terminology, facts, ways and means of dealing with classifications, categories and principles of motherboards, processors, and memory in desktop computer systems. (SCANS V-A, B)
L. Demonstrate knowledge of basic types of printers, basic concepts, and printer components, how they work, how they print onto a page, paper path, care and service techniques, and common problems. (SCANS V-A, B, C)

VIII. ASSESSMENT:

Assignments will be collected, evaluated and returned to the student. Students will be evaluated on assignments, tests, and final exam, and Final Skills Test.

In order to complete Cisco IT Essential I curriculum, students must pass all required online testing, Finals, and Skills Lab Evaluation.

Vernon College does not discriminate on the basis of color, race, sex, age, national origin, or disability.
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CIP Code: 47.0104