

## **Electronic Engineering Technology**

## **Course Description**

#### CPMT 1411 INTRODUCTION TO COMPUTER MAINTENANCE CRN

Credit: 4 (3 lecture, 2 lab)

A study of the information for the assembly of a microcomputer system. Emphasis on the evaluation of microprocessors and microprocessor bus structure. (ELET 2331)

## **Prerequisites**

#### None

## Course Goals (includes competencies, incorporation of SCANS, etc.)

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

- 1. Read and utilize all assigned materials (text, manufacture's manuals, instructor provided supplementary materials).
- 2. Install and test PC subsystems.
- 3. Use hardware and software diagnostics. The learning outcome in this section correspond to following **SCANS** requirements:
- -Student maintains/troubleshoots computer system.
- **4.** Build a microcomputer system. The learning outcome in this section correspond to following **SCANS** requirements:
- -Student Improves/designs system in the computer hardware area.
- **5**. Write a lab report, answer review questions, and work in a lab-group for required experiments in the computer hardware area. The learning outcome in this section correspond to following **SCANS** requirements:
- -Student works with a group as a team member and learn to work with diversity in order to accomplish task successfully.
- -Student learns different methods of acquiring and learning information in order to accomplish tasks and present to the team members and instructor.

## **Instructor Information**

Vineet Aggarwal Houston Community College Electronic Engineering Technology 555 Community College Drive Houston, TX 77013 Tel 214 274 7934.

Email vineetagg@hotmail.edu

Class meets: 8 AM -1 PM Saturday Room: 212 Coldwell Building, HCC Northeast Office hours: Immediately After the Class.

# Textbook Information

**TEXTBOOK:** A+ GUIDE TO Hardware MANAGING AND MAINTAINING and Troubleshooting, Jean Andrews, 5th ed Edition Enhanced ISBN 978-1-4354-8738-3 Published by Course Technology

LAB MANUAL: A+ guide to hardware, 4<sup>th</sup> edition, Jean Andrews, ISBN: 0-619-21766-9

Computer generated, typed, laboratory reports are required.

#### Special:

Equipment Basic tool kit recommended:

- · screw drivers Philips and slot head, large and small
- · Pliers standard and needle nose
- multimeter

## Lab Requirements (if any)

Please contact instructor at the start of semester regarding this section.

## **Students with Disabilities**

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office.

#### **Academic Honesty**

Academic dishonesty can result in a grade of F or 0 for the particular test or assignment involved, dropped, and/or expelled from HCCS. Please refer to the HCCS Student Handbook for further information regarding Academic Dishonesty.

#### **Attendance and Withdrawal Policies**

#### **Attendance**

Students are expected to attend all classes in which they are enrolled regularly. Class attendance is the responsibility of the student. It is also the responsibility of the student to consult with the instructor regarding an absence from a class. Class attendance is checked regularly by the instructor. A student may miss 12.5% of total class hours. Reports of excessive absence will be sent to the Veterans Administration, Social Security Office, and other agencies responsible for aid to the student when appropriate.

#### **Drop or Withdrawal Policies**

A student may drop a course or withdraw from the college by following the procedure outlined by the Campus Director. Should circumstances prevent a student from appearing in person to withdraw, withdrawal may be completed by writing to the Registrar's Office. A drop or withdrawal request will not be accepted by telephone. A student, who ceases to attend a class without officially dropping or withdrawing, will be given a grade of "F" for non-attendance. A semester-hour student who fails to attend classes by the twelfth class day of a regular term will be administratively withdrawn from the class roll. Students who officially withdraw from a course during the first twelve days of a regular term will not receive a grade and the course will not appear in their permanent records. Students withdrawing from a course after this period and prior to the deadline designated in the college calendar will receive a "W". A student may not withdraw from a course during the last two weeks prior to the final examination period.

**Notice:** Students who repeat a course three or more times may soon face significant tuition/fee increases at HCCS and other Texas public colleges and universities. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your habits, reading and writing homework, test-taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

## **Course Requirements and Grading Policy**

## **HCCS Grading System**

The Houston Community College grading system will be used to evaluate students' performance in this course.

Grade	Score		
A-Excellent	90-100		
B-Good	80-89		
C-Fair	70-79		
D-Passing	60-69		
F-Failure	0-59		

## **Testing**

Exam 1 30%

Exam 2 40%

Lab Reports: 20%

Class Attendance & Participation: 10%

## Make-up policy

Students are expected to adhere to the weekly schedule of assignments printed in the course syllabus. Late assignments and make-up assignments will only be accepted at the discretion of the instructor. All assignments for each session are due at the end of their respective session.

Make-up tests will be given at the discretion of the instructor.

## Projects, Assignments, Portfolios, Service Learning, Internships, etc.

Please contact instructor at the start of semester regarding this section

## **Course Content**

Please contact instructor at the start of semester regarding this section

## **Course Calendar with Reading Assignments**

WEEK 1-2	LECTURE TOPIC How Computers Work	READING ch. 1, 2	REMARKS
	PC Power Supplies	ch. 2	
3,4	Motherboard Basics Ram/Rom	ch. 3 ch. 5	
5	Supporting HDD	ch 6	
6,7	Supporting I/O Devices Input Devices Video Testing	ch. 7	
8	Exam 1	March 19	
9	Multimedia, Mass Storage Devices	ch. 8	
10,11	PC Maintenance, Troubleshooting	ch. 9	
12,13	PCs on a Network	Ch. 10	
14,15	Supporting Notebooks, Review	ch. 11	
16	FINAL EXAM	Saturday May 14	

Other Student Information (clubs, tutoring, web resources, etc.)