



**TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS**

The Administrative- Master Syllabus is an administrative tool; it is **not intended to be distributed to students**. It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of TVCC, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction. The Administrative-Master Syllabus will demonstrate that there is consistency and comparability in course offerings.

Course Title

Personal Computer Hardware

Course Prefix and Number

ITSC 1325

Department – Division

Computer Science

Course Type – select from one of the following categories.

- **Academic General Education Course** (from ACGM – but not in TVCC Core)
- **Academic TVCC Core Course**
- X- **WECM Courses**

Semester Credit Hours: Lecture Hours: Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	2	4

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description

A study of current personal computer hardware including personal computer assembly, upgrading and repair, setup and configuration, and troubleshooting.

Prerequisites/co requisites

None

Topical Outline

The course is designed to be a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware, as well as helping to prepare for CompTIA's new 2006 A+ Exams. Specific topic coverage includes: Hardware Needs Software to Work PC Repair Fundamentals Form Factors and Power Supplies Processors and Chip sets Motherboards Upgrading Memory Hard Drives Installing and Supporting I/O Devices Multimedia Devices and Mass Storage PCs on a Network Notebooks, Tablet PCs, and PDAs Supporting Printers and Scanners..

Course Learning Outcomes

The student will acquire an understanding of the following course learning outcomes:

- Identify the names, purposes and characteristics of storage devices
- Identify the names, purposes, and characteristics of motherboards
- Identify the names, purposes, and characteristics of power supplies
- Identify the names, purposes, and characteristics of processors/CPUs
- Identify the names, purposes, and characteristics of memory
- Identify the names, purposes, and characteristics of display devices
- Identify the names, purposes, and characteristics of input devices
- Identify the names, purposes, and characteristics of adapter cards
- Identify the names, purposes, and characteristics of ports and cables
- Identify the names, purposes, and characteristics of motherboards
- Install, configure, optimize and upgrade personal computer components.
- Identify tools, diagnostic procedures and troubleshooting techniques for personal computer components.
- Recognize and isolate issues with displays, power, basic input devices, storage, memory, thermal, POST errors.
- Apply basic troubleshooting techniques to check for problems.

- Perform preventive maintenance on personal computer components
- Identify the fundamental principles of using laptops and portable devices.
- Identify the fundamentals of using operating systems
- Install, configure, optimize and upgrade operating systems
- Identify tools, diagnostic procedures and troubleshooting techniques for operating systems
- Perform preventive maintenance on operating systems
- Identify the fundamental principles of using printers and scanners.
- Identify the concepts of installing, configuring, optimizing and upgrading printers and scanners.
- Identify tools, diagnostic procedures and troubleshooting techniques for printers and scanners
- Identify the fundamental principles of networks.
- Identify the fundamental principles of security.
- Describe the aspects and importance of safety and environmental issues.
- Use good communication skills.

Relationship to General Education Outcomes – In addition to the core competencies, Trinity Valley Community College has established ten general education goals which specify knowledge and skills that students should gain from completing courses in the various component areas of the core curriculum. Information regarding curriculum and assessment as a means for the improvement of student learning through the general education component. (Select all that apply.)

Mark with an "X"	General Education Outcome
	A. To communicate clearly and effectively in both oral and written English.
	B. To improve reading skills focused on comprehending, analyzing, interpreting, and evaluating printed materials.
	C. To understand mathematical information and utilize mathematical skills.
X	D. To demonstrate qualitative and quantitative critical thinking skills.
	E. To understand and appreciate cultural and ethnic diversity.
X	F. To utilize computer based technology in accessing information, solving problems, and communicating.
	G. To recognize and evaluate artistic achievements in the visual and performing arts.
	H. To improve basic understanding of political, economic, and social systems.
	I. To demonstrate knowledge of the physical universe and living systems.
	J. To develop skills and strategies to become an engaged learner.

Required Text(s)

The current edition of the textbook from the bookstore.

Optional Text(s)

None

Material/Technology to be supplied by the student.

If the student is taking this course as an Internet course, then the student is responsible for having access to the Internet.

The student will need a storage media to save laboratory assignments and practice exams on.

Course Requirements/Grading System – describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course; not intended to restrict the individual nature by which each faculty member who teaches the course determines course requirements and final student performance, but should offer consistency within reason for all sections taught for those departments without a standardized format.

GRADING SYSTEM:

The student's grade will be determined by performance on quizzes, unit tests, laboratory assignments and a final. The class instructor prepares the individual grade criteria with respect to the departmental syllabus.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by	Signature	Date
Department Head	Signature	Date
Division Chair	Signature	Date
Vice President	Signature	Date