

IT ESSENTIALS

Course Title: Computer Support

Course Code/Section #: TDFAF/TDFEF

Units of Credit: 5

Meeting Times/Dates: 09/02/2009 – 06/17/2010

Instructor Name: Hector Albizo

Location/Room #: 72

Contact Info: halbizo@fremont.k12.ca.us or

halbizo@mvp.org

Course Description: This course provides students with the skills and knowledge of personal computers; safe lab procedures and tool use; preventive maintenance and troubleshooting of computers and components; fundamentals of computer operating systems, laptops, portable devices, networks, security and communication skills in the workplace. The focus is on personal computer hardware and operating systems. The first phase of this course (Chapters 1-10) assists students to prepare for Comp TIA A+ core certification and IC3 Certification exams. This course uses a combination of lectures, Power Point presentations, discussions, and hands-on projects to develop skills and the ability to disassemble and assemble computers, and identify, install, configure, and trouble shoot computer hardware and field replaceable components and computer operating systems.

The second phase of this course covers advanced topics (Chapter 11-16) and will assist students to prepare for any one of three Comp TIA A+ job environment certifications: IT field technician; remote support technician; or bench technician, which completes the Comp TIA A+ certification process, and IC3 Certification exams. Through a combination of lectures, Power Point presentations, discussions, and increased hands-on labs, with advanced topics on personal computers, computer operating systems, printer and scanners, networks and security

An emphasis is on providing students with basic skills and knowledge to pass the industry certification exams and to embark on a successful career in the field of information technology.

Students will also develop a sufficient understanding of energy consumption and conservation in the field of Information Technology and environmental effects through a series of lecture, presentations and hands-on lab activities. Advancements in technology such Cloud computing, NComputing and and Web 2.0 will challenge students to think critically; understand their role and responsibility, and further develop their understanding of how these technologies can be used in the work place to reduce energy consumption.

Prerequisites: none

Course Objectives:

- Develop critical thinking skills
- Demonstrate essential workplace skills
- Demonstrate essential customer service skills for use in industry
- Demonstrate effective ethical behavior and communication skills in the workplace
- Diagnose and troubleshoot common hardware and operating system problems
- Demonstrate dis-assembly and assembly of computers systems
- Demonstrate installation, configuration, and upgrading of computer hardware devices and operating systems
- Identify preventative maintenance, safety, and environmental issues
- Distinguish various types of motherboards and enclosure form factors, processors, memory, internal/external hard drives, expansion slots
- Recognize different print technology and common printer problems

- Identify basic networking concepts, services, protocols and capabilities.
- Network and computers security

Required Text, Material, Tools, and Resources: Cisco Systems IT Essentials on-line curriculum will be used by the student by Cisco in lieu of assigned textbooks. This curriculum may be accessed on or off campus. Reference materials will be made available for classroom use as needed.

Each student will need a one-inch, three-ring binder and five sheet protectors for his/her personal engineering journal for note taking. This binder will also be used for the purpose of a resume, job application, student projects documentation and certificate of completion to be issued by Cisco Systems upon successful completion of the course.

Grading Policy: Grading will consist of the following:

Attendance — 25%

On-line examinations — 30%

Class work/participation — 25%

Hands-on projects — 20%

Weekly Assignment Schedule: All assignments will be posted daily on the class whiteboard.

Attendance Policy: Just as in business and industry, where employees are expected to show up on time every day, students are expected to be on time for classes every day.

Make up assignments will be given for excused absences only, which include medical, legal or bereavement circumstances. Failure to complete make up assignments will adversely affect your grade. If you are tardy or miss a class multiple times, you will lose units of credit and your grade will be adversely affected. **Be advised that credits are earned by attendance only and cannot be made up.**

Students must arrive on time to class. Talking on a cell phone or having personal conversation outside the class is unproductive and will be considered a tardy. Tardiness reduces instructional time and is disruptive to the classroom. Tardiness may prevent the student from receiving a course certificate. Perfect attendance certificates will only be issued to students who have no absences or tardiness. There are no exceptions.

In-Class Events: There are certain events during the school year designed to expose the student to the industry and other technology events. These events are voluntary and students are encouraged to participate; currently, Cisco Systems Shadow Day, STRUT competition, and Cisco at Ohlone, to name a few. Others may be scheduled during the course of the school year.

Student Name (PRINT) _____ Student Signature _____

Parent/Guardian signature _____