Inver Hills Community College

ITC 2000: PC Hardware and Software (A+)

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites:
READ 0093 - Reading College Texts (Minimum grade: 1.67 GPA equivalent) AND ENG 0099 - Introduction to Academic Writing (Minimum grade: 1.67 GPA equivalent); OR
READ 0094 - Reading Workshop (Minimum grade: 1.67 GPA equivalent) AND ENG 0099 - Introduction to Academic Writing (Minimum grade: 1.67 GPA equivalent)

Corequisites: None

MnTC Goals: None

Presents an in-depth exposure to computer hardware and operating systems. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. This course helps students prepare for CompTIA's A+ certification exam, which covers the knowledge and skills essential for becoming a successful computer technician. Prerequisites: Placement into ENG 1108 or completion of both ENG 0099 and READ 0093/0094 with a grade of C or higher.

B. COURSE EFFECTIVE DATES: 08/26/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Hardware: 27%
2. Networking: 15%
3. Operating System and Software: 20%
4. Operational Procedure: 10%
5. Security: 8%
6. Troubleshooting, Repair & Maintenance: 20%

D. LEARNING OUTCOMES (General)

1. Explain motherboard components, types and features
2. Explain the process and steps to install and configure the Windows OS
3. Given a scenario, demonstrate proper use of user interfaces
4. Given a scenario, demonstrate the appropriate use of communication skills and professionalism in the workplace
5. Given a scenario, determine the troubleshooting methods and tools for printers
6. Explain the basic principles of security concepts and technologies
7. Categorize network cables and connectors and their implementations
8. Classify power supplies types and characteristics
9. Compare and contrast memory types, characteristics and their purpose
10. Compare and contrast the different Windows Operating Systems and their features
11. Compare and contrast the different network types
12. Distinguish between the different display devices and their characteristics
13. Explain cooling methods and devices
14. Explain the purpose and characteristics of CPUs and their features
15. Given a scenario, explain and interpret common hardware and operating system symptoms and their causes
16. Given a scenario, explain and interpret common laptop issues and determine the appropriate basic troubleshooting method
17. Given a scenario, explain the troubleshooting theory
18. Given a scenario, install, configure and maintain
19. Given a scenario, integrate common preventative maintenance techniques
20. Install and configure peripherals and input devices
21. Install and configure printers
22. Install, configure and optimize laptop components and features
23. Outline the purpose of appropriate safety and environmental procedures and given a scenario apply them
24. Summarize the basics of networking fundamentals, including technologies, devices and protocols
25. Summarize the following security features
26. Summarize the function and types of adapter cards

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted