HIGHLAND
COMMUNITY COLLEGE

Department:

Computer Support Technology

Course Description:

This course is intended to introduce the student to various computer components, business systems and the basics of troubleshooting the Personal Computer (PC), networks, and mobile devices. Safety and proper tool usage will be reinforced. The student will be introduced to the techniques used to isolate and resolve computer, network, and mobile device issues and problems, multimedia technology, input-output devices, including monitors and video cards. Instruction will be given on basic electrical principles and PC power supplies.

Course Competencies:

The learning outcomes and competencies detailed in this syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups for this course as approved by the Kansas Board of Regents.

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

1. Identify the fundamental principles of using personal computers, laptops, portable devices, and networks
2. Install, configure, optimize and upgrade personal computer, laptops, portable devices and network components
3. Identify tools, diagnostic procedures and troubleshooting techniques for personal computers, laptops, portable devices and network components
4. Perform preventive maintenance on personal computers, laptops, portable devices and network components
5. Demonstrate proper safety techniques and workplace skills throughout competency area
6. Identify potential hazards and implement proper safety procedures including Electro Static Discharge (ESD) precautions and procedures, safe work environment and equipment handling
7. Identify proper disposal procedures for batteries, display devices and chemical solvents and cans
8. Identify tools, basic diagnostic procedures and troubleshooting techniques for printers and scanners
9. Install, configure, optimize and upgrade various hardware and networks
10. Describe the aspects and importance of safety and environmental issues

Course Content:

A. The Visible Computer
B. CPUs
C. RAM
D. Firmware
E. Motherboards

F. Power Supplies
G. Mass Storage
H. Implementing Mass Storage
I. Essential Peripherals
J. Display Technologies
K. Essentials of Networking
L. Local Area Networking
M. Wireless Networking
N. The Internet
O. Virtualization
P. Portable Computing
Q. Understanding Mobile Devices
R. Maintaining and Securing Mobile Devices
S. Printers and Multifunction Devices

Learning Assessments:

Competencies will be assessed by assignments, case problems, quizzes, chapter tests, hands-on projects, lab assignments, a midterm test, and a final test. The test can be in the objective format or in a problem solving format.

Instructional Materials:

Textbooks: Meyers, M. (2023). *Managing and Troubleshooting PCs: Exams 220-1101 & 220-1102*, (7th ed.)*. McGraw-Hill Education. ISBN 978-1264712748

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our Disability Services website.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an online report about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our Equity Grievance Policy.