CLEVELAND INSTITUTE OF ELECTRONICS SYLLABUS

Course Number: M110

Course Name: Introduction to Computers

Course Clock Hours: 120

Course Prerequisites: None

Course Co-requisites: None

Course Contact Information: www.cie-wc.edu faculty@cie-wc.edu
http://cie-wc.edu/Student-services-policies.aspx 1-800-243-6446 (216) 781-9400 (216) 781-0331 (fax)

Course Description: This course was designed to present a general introduction to computers utilizing the most-up-to-date technology in an ever-changing discipline to provide an in-depth understanding of why computers are essential in business and society. This course will explore the fundamentals of and the terms associated with computers and mobile devices, the Internet, programs and apps, and digital safety and security. The course will present strategies for purchasing desktop computers, mobile computers, and mobile devices.

Course Objectives: Upon completion of this course the student will:

- Describe the relationship between data and information
- Explain how the web uses graphics, animation, audio, video, and virtual reality
- Describe cloud computing and identify its uses
- Define an operating system
- Differentiate between low-level languages and procedural languages
- Explain ways that software manufacturers protect against software piracy
- Explain the purpose of communications software
- Differentiate between storage and memory

Course Readings: The required readings will be drawn from a textbook published by Course Technology/Cengage Learning. The authors are Misty E. Vermaat, Susan L. Sebok, Steven M. Freund, Jennifer T. Campbell, and Mark Frydenberg and the title of the textbook is Enhanced Discovering Computers 2016 1st Edition (ISBN 1305391853). Students should complete the required readings and solve all problems in the exercise sections before continuing to the next topic.

Student Evaluation, Grading, and Assessment: Each of the eight lessons concludes with an examination; all examinations are open book. The examinations consist of multiple choice questions (MCQs) that measure cognitive learning levels. The minimum passing score of 70% must be achieved but if the score is less than 70%, the examination must be retaken to earn a passing score of 70% for the lesson. The eight examination scores are averaged together in calculating the course grade.

93% - 100%	A	The final grade for this course will be determined as follows:
86% - 92.9%	B	Eight examinations = 100%
78% - 85.9%	C	
70% - 77.9%	D	

Course Schedule: You should complete the following lessons in the order shown in the table. It is best to complete 1-2 lessons per week to maintain your schedule.

Lesson Number	Title of Lesson	Topics Covered
6901A	Digital Literacy and the Internet	• laptops, tablets, desktops, and servers • wired and wireless network technologies s • the purpose of an IP address • the rules of netiquette
6902A	Computers and Mobile Devices and Programs and Apps	• the characteristics and uses of smartphones, digital cameras, portable media players, and e-book readers • the characteristics and types of servers • the key features of productivity applications • the key features of security tools
6903A	Digital Safety and Security and Inside Computers and Mobile Devices	• risks and safeguards associated with wireless communications • the types of cybercriminals • the advantages and services of cloud computing • the function of a bus
6904A	Input and Output and Digital Storage	• characteristics of pointing devices • characteristics of displays • storage and memory • types of memory cards and USB flash drives
6905A	Operating Systems	• mobile operating systems • desktop operating systems • file management and other tools included with an operating system
6906A	Communications and Networks	• LANs, MANs, WANs, and PANs • network communications standards and protocols • set up and configure a home network • wireless transmission media
6907A	Information and Data Management	• how a database interacts with data and information • file maintenance techniques • database management systems • information systems used in an enterprise
6908A	Information Systems and Program Development	• system development and the system development phases • the importance of project management • low-level languages and procedural languages • programming languages and application development tools