Administrative Unit: Computer and Mathematical Sciences Department

Course Prefix and Number: CISS 170

Course Title: Introduction to Computer Information Systems

Number of: Credit Hours: 3  Lecture Hours: 3  Laboratory Hours: 0

Catalog Description: Overview of computer hardware, software, programming and information systems as applied in the modern business environment. Hands on applications of word processing, spreadsheet, and data management software are used to explore use of microcomputers in business. G.E.

Prerequisite(s)/Corequisite(s): None.

Text(s): Most current edition of the following:


Course Objectives:

- To develop a firm foundation in computer technology, computer nomenclature, terminology, and the use of computers as productive tools.
- To develop a firm understanding of what computers are, how they operate, and how they are used today.
- To explore the information processing industry and issues in contemporary computing.

Measurable Learning Outcomes:

- Identify and describe the components of a computer, the purpose of a network, categories of computers and their characteristics, and the elements of an information system.
- Identify and describe the components of the internet and types of e-commerce and their audiences.
- Demonstrate ability to search for information on the Web.
- Identify the categories of application software, give examples of each, and explain the ways software is distributed.
- Identify and describe the purpose of each component of the system unit including the processor, chips, adapter cards and motherboard.
- Identify chips, adapter cards and other components of
a motherboard.
- Identify and describe various input devices including optical scanners, reading devices, and biometric input devices.
- Identify different types of storage media, explain how each works, and compare their advantages and disadvantages.
- Identify and compare types of system software and network operating systems and describe the functions of an operating system.
- Identify and describe the components required for successful digital transfer of data and communications.
- Explain the advantages and disadvantages of using a network and of various types of physical transmission media.
- Describe the advantages of databases over flat file structures.
- Explain the functions common to most database management systems and compare the advantages and disadvantages of different types of databases.
- Describe types of computer security risks and identify safeguards for each.
- Identify the five phases in the system development life cycle and describe the various steps in each phase.
- Identify the five generations of computer languages and describe their characteristics.
- Identify and describe steps in the program development cycle.
- Describe characteristics of object oriented programming languages and identify examples.
- Identify and describe the types of technologies and management systems used throughout an enterprise computing corporation.
- Describe career opportunities available in various segments of the computer industry and identify the various certification programs in IT.
- Demonstrate mastery in using productivity software such as M/S Office.

Topical Outline (major areas of coverage):
- Overview of Computers
- The Internet
- Software
- The System Unit
- Input and Output Devices
- Storage Devices
- Operating Systems
- Communication Networks
- Security
- Databases
- Programming Languages
- Careers

Recommended maximum class size for this course: 24
Library Resources: Online databases are available at http://www.ccis.edu/offices/library/resources.asp. You may access them from off-campus using your eServices login and password when prompted.

Prepared by: Arlin Epperson
Date: February 1, 2005

NOTE: The intention of the master syllabus is to provide an outline of the contents of this course, as specified by the faculty of Columbia College, regardless of who teaches the course, when it is taught or where it is taught. Faculty members teaching this course for Columbia College are expected to facilitate learning pursuant to the course objectives and cover the subjects listed in the topical outline. However, instructors are also encouraged to cover additional topics of interest so long as those topics are relevant to the course’s subject. The master syllabus is, therefore, prescriptive in nature but also allows for a diversity of individual approaches to course material.