

CIS 150: Syllabus of Record

Course Prefix and Number: CIS 150

Course Title: Introduction to Computing

Credits: 3.0

Prerequisites: N/A

Description: Basic principles of computing, including study of the major components of a computer system. Introduction to software packages such as word processors, spreadsheets, databases, and languages. (3-0-0) Offered every semester.

Objectives

After successful completion of the course, students will be able to:

1. Demonstrate understanding of the essential features and functions of computer hardware and software in the context of contemporary business technology
2. Analyze business needs and use application software to meet those needs
3. Design and create professional documents using word processing software
4. Create formulas and charts to represent numeric data using spreadsheet software
5. Create and administer databases for effective data access and maintenance using database software

Topics

1. Using Technology to Change the World: digital devices - hardware components, input, output, storage, memory; application software: software categories, platforms, deployment types; system software: operating systems and utilities – 2 weeks
2. How the Internet Works: the WWW, social media, best online practices, privacy, security; digital lifestyle - media and ethics – 2 weeks
3. Understanding Networks and Databases: Internet control, file sharing, architecture, topology; information systems: enterprise, e-commerce, system analysis and development; digital security: authentication, malware, online intrusions; databases: application data tools, Big Data, data analysis; programming: languages and tools - 3 weeks
4. Microsoft Office: Word (font attributes, text styles, MLA & APA style for research papers, formatting paragraphs, creation of citations and bibliography) - 1 week
5. Microsoft Office: Excel (what-if analysis, cell references, logical and financial functions, creation of histograms and Pareto charts, sparklines, PivotTables and PivotCharts) – 4 weeks
6. Microsoft Office: Access (table design, fields properties, primary keys, data import from Excel, table relationships, designing graphical user interfaces with forms and subforms, maintaining data integrity, presenting data through reports with conditional formatting – 2 weeks

Methods of Evaluation

1. Exams (30% - 45%)
2. Homework assignments (20% - 35%)
3. Projects – semester & weekly (15% - 30%)
4. Lecture quizzes (15%-30%)

Sample Source(s) of Information

1. Technology in Action, Pearson
2. Exploring & Comprehensive Microsoft Office, Pearson
3. MyLab IT for Office