

ITIS 115: COMPUTER INFORMATION SYSTEMS

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2021
Credits:	3.5
Total Contact Hours:	81
Lecture Hours :	54
Lab Hours:	27
Hours Arranged:	0
Outside of Class Hours:	108
Strongly Recommended:	ITIS 099; ENGL 101.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter, Pass/No Pass

Catalog Course Description

This course is an overview of information technology and its role in business, industry, health care, and government. Topics include computer hardware, end-user software, network/Internet technologies, ethics, emerging technologies, and coding. 54 lecture hours, 27 lab hours.

Course Objectives

- Describe existing and emerging technologies and their impact on organizations and society.
- Use appropriate Information Technology applications (word processing, spreadsheet, database) and systems to solve common business problems.
- Demonstrate an understanding of the development and use of information systems in business.
- Identify the basic hardware components of personal computers and understand their role in the information processing cycle.
- Understand the differences between system software and productivity software.
- Understand the similarities and differences of various operating systems for personal computers.
- Use a high level programming language to create a basic user interface in order to illustrate the concepts of sequence, selection and repetition.

Major Course Content

1. Computer Basics
 - a. History
 - b. Terminology
2. Hardware Components
 - a. System unit
 - b. Input/Output devices
 - c. Storage devices
 - d. Communication devices
3. Computers in Business
 - a. Security
 - b. Privacy
 - c. Big Data
4. Software
 - a. System software
 - i. Windows
 - ii. Mac OS
 - iii. Other OS
 1. Linux OS
 2. Cloud Storage
 - iv. File Management
 - b. Application software
 - i. Microsoft® Office: Word, Excel, and Access
5. Communications and Networks
 - a. Computer Networks
 - b. Network Security
 - c. The Internet and World Wide Web
6. Systems Development
 - a. Program Design
 - b. Program Coding
 - i. Object Oriented Programming and Visual Programmng
 - ii. Programming Languages
 - iii. Markup Languages
 - iv. Scripting Languages
 - c. Life Cycle of a Software Project
7. Computers and Society
 - a. Ethics
 - b. Computer Security, Crime, and Privacy
 - c. Social Networks
 - i. Impact on Society
8. Emerging Technologies
 - a. Existing technologies
 - b. Impact on organizations and society
9. Overview of information systems, software applications, and programming basics. Topics include:
 - a. Computers and digital basics
 - b. Types of Information Systems
 - i. Development of information systems in business
 - ii. Role in business
 - c. Description of computer hardware: Personal computer basics, microprocessors and memory, storage devices, input and output devices, hardware security.
 - d. Description of computer software: Software basics, end-user applications, installing software and upgrades, security software.
 - e. Operating systems and file management: Overview of today's operating systems, use of Windows Explorer, backup and security methods.
 - f. Description of LANs and WLANs: Network classifications, standards, devices and physical topology, wired networks, wireless networks, security through encryption.
10. The Internet: Internet technology, fixed internet access, portable and mobile internet access, internet services (i.e., real-time messaging, VOIP, FTP, file sharing).
 - a. The Web and e-mail: HTTP, web browsers, search engines, e-commerce basics, e-mail overview, cookies, web and email security.

11. Introduction to the use of productivity software: Word processing, electronic spreadsheets, and database management
12. Introduction to programming: Procedural program creation, introduction to algorithm development and an overview of the three programming structures (i.e., sequence, selection and repetition) via a modern programming language.

Lab Content

1. Business Productivity Software
 - a. Word Processing
 - i. Basic editing and formatting
 - b. Spreadsheet
 - i. Common formulas and functions
 - ii. Formatting
 - iii. Conditional formatting
 - iv. Charting
 - c. Database
 - i. Tables and field definitions
 - ii. Forms
 - iii. Reports
 1. Grouping
 2. Address labels
2. Internet Technologies
 - a. Locating information using a search engine
 - b. Email, instant messaging
3. Coding
 - a. Definition and Design
 - i. Flowcharts
 - b. Variables and Data Types
 - c. Math Operators
 - d. Conditional Statements
 - e. Errors
 - i. Syntax Errors
 - ii. Logic Errors

Suggested Reading Other Than Required Textbook

office.microsoft.com/training, howstuffworks.com, w3schools.com

Examples of Required Writing Assignments

Create a one paragraph summary of the D5 conference starring Bill Gates and Steve Jobs as they discuss the future of technology.

Examples of Outside Assignments

Create a spreadsheet that calculates the weekly pay for full-time employees at a fictitious business.

Instruction Type(s)

Lecture, Lab, Online Education Lecture, Online Education Lab