CIS A111: INTRODUCTION TO COMPUTER INFORMATION SYSTEMS

Item	Value
Curriculum Committee Approval Date	12/04/2024
Top Code	070100 - Information Technology, General
Units	3 Total Units
Hours	72 Total Hours (Lecture Hours 45; Lab Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)
Associate Arts Local General Education (GE)	• Area 7 Life Skills, Lifelong Learning, and Self-Development 7A Theory/ Non-activity (OE1)

Course Description

Introductory course in the applications of information systems in business. Students will learn about Information Systems, hardware and software components, networks, ethics and security issues, ecommerce, and Web page design. Use of spreadsheet and database management software to create computer-based solutions to business problems. Meets the lower division computer requirement for business majors at some CSU and UC campuses. Enrollment Limitation: CIS A111H; students who complete CIS A111 may not enroll in or receive credit for CIS A111H. Transfer Credit: CSU; UC. C-ID: BUS 140, IT IS 120.**C-ID:** BUS 140, IT IS 120.

Course Level Student Learning Outcome(s)

1. Explain the concept of a network and its security issues, and identify hardware and software needed to create wired and wireless networks.
2. Use a spreadsheet software package to solve common business problems through correct usage of formulas and functions, lists and data management, charts and printed reports.
3. Use a database software package to solve common business problems through design and implementation of database objects.

Course Objectives

- 1. Recognize basic computer terminology.
- 2. Describe existing and emerging information technologies and systems, and their impact on organizations and society.
- 3. Demonstrate ability to use email effectively.
- 4. Gather research data from the World Wide Web.
- 5. Demonstrate the ability to use Windows operating system.
- 6. Produce and format worksheets and charts.
- 7. Create and build databases.
- 8. Produce projects that integrate data created in various application programs.
- 9. Relate information technology to everyday life.
- 10. Create and publish Web pages using HTML markup language.
- 11. Identify types of computer crime.
- 12. Recognize issues related to information accuracy, rights, and conduct.

Lecture Content

Introduction Use of information in an organization Process involved in the effective use of the information Computer Hardware and Software Fundamental organization of a computer Input Output Storage Internal representation of data Evaluation of hardware components Comparison of open vs. proprietary platforms and software Evaluating software when planning a system Communications and Networks Wired versus wireless networks Hardware Software Internet Email Sending, replying, forwarding, adding attachments World Wide Web Search engines E-commerce Privacy and security concepts Multimedia Web Page Design Introduction to HTML Creating links Formatting Web pages using HTML Creating and formatting tables Working with images Introduction to Cascading Style Sheets Publishing Web pages to a Web server Systems Approach Information systems development Program development and programming languages System Development Life Cycle Planning Analysis Design Development Testing Implementation Maintenance Information Systems Security Information systems security and privacy Different types of computer crime Ethics in computing Techniques to prevent unauthorized computer access and use Encryption and its necessity in computing Windows Windows Explorer, My Computer Creating folders, copying, moving, deleting, renaming, creating shortcuts Electr onic Spreadsheet Software Creating worksheets Creating different types of charts Formatting worksheets Creating formulas Absolute vs. relative cell referencing Creating logical, statistical, financial, and date functions Creating data tables Working with hyperlinks Creating and using databases Building and using templates Working with multiple worksheets Linking a worksheet to other worksheets and workbooks Database Management Software Creating tables Designing reports Creating and using forms Sorting data Creating and using queries Using criteria Joining tables Maintaining a database Working with hyperlinks Designing sub-forms

Lab Content

Web Page Design Introduction to HTML Creating links Formatting Web pages using HTML tags Creating and formatting tables Working with images Introduction to Cascading Style Sheets Publishing Web pages to a Web server Windows Windows Explorer, My Computer Creating folders, copying, moving, deleting, renaming, creating shortcuts Electronic Spreadsheet Software Creating worksheets Creating different types of charts Formatting worksheets Creating formulas Absolute vs. relative cell referencing Creating logical, statistical, financial, and date functions Creating data tables Working with hyperlinks Creating and using databases Building and using templates Working with multiple worksheets Linking a worksheet to other worksheets and workbooks Database Management Software Creating tables Designing reports Creating and using forms Sorting data Creating and using queries Using criteria Joining tables Maintaining a database Working with hyperlinks Designing sub-forms

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)
- Lab (04)
- DE Live Online Lab (04S)
- DE Online Lab (04X)

Instructional Techniques

Lecture, Lab, Discussions.

Reading Assignments

Student will spend approximately 3 hours on assigned weekly reading from the textbook.

Writing Assignments

Student will spend approximately an hour per week on the written assignments.

Out-of-class Assignments

Students will spend a minimum of 2 hours per week on the assigned labs.

Demonstration of Critical Thinking

Quizzes, computer projects, exams consisting of multiple choice, true or false, and essay questions

Required Writing, Problem Solving, Skills Demonstration

Exams, essay questions

Eligible Disciplines

Computer information systems (computer network installation, microcomputer ...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Computer information systems (computer network installation, microcomputer ...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Computer information systems (computer network installation, microcomputer ...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Vermaat / Sebok. Discovering Computers: Digital Technology, Data, and Devices , 17 ed. Boston: Course Technology, 2023 2. Required Freund / Starks. Excel 2019, ed. Boston: Course Technology, 2019 3. Required Cable / Monk. Access 2019, ed. Boston: Course Technology, 2019