

Course Outcomes	CSC 1100
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CSC 1100: Computers in Society

Credit Hours: 3 hours (2 hour lecture, 2 hours laboratory)

Frequency: Fall and Spring semesters

Prerequisites:

Credit in MATH 1021 or registration in MATH 1023. Credit will not be given for this course and ISDS 1100 or LIS 2001 or EXST 2000.

Prerequisites by Topics:

Basic mathematics skills

Catalog Course Description:

Introduction to computers, their applications, and impact on people and social institutions; the Internet, E-mail, news groups, ftp, telnet, World Wide Web, multimedia, word processing, spreadsheets, databases.

Course Outcomes

1. Master understanding of impact of computers on society.
2. Be familiar with basic hardware and software computer concepts.
3. Be familiar with networks, the Internet, and the World Wide Web.
4. Be familiar with the history of computers, including programming language development and influential persons.
5. Be familiar with security and privacy issues.
6. Be familiar to social and ethical issues related to computer technology.
7. Master creation of formatted documents using a word processor.
8. Master creation of electronic presentations using presentation software.
9. Master basic data analysis using a spreadsheet program.
10. Be familiar with creation of web pages.
11. Master basic creation of an application using a database platform.
12. Be exposed to the concepts and constructs of programming languages, the syntax and semantics of programming languages and the steps necessary for creating computer software.

Texts and Other Course Materials

- Microsoft Office 2003 Enhanced - Shelly Cashman 0-619-25574-9 PB Latest Course Technology

Major Topics

- History of computing.
- Parts of a computer including peripherals, the system board, the CPU, etc. Measures of processor speed and disk capacity.
- Temporary and permanent storage of data.
- Types of software including production software and operating systems.
- Using email, newsgroups, listservs, chat rooms, blogs, etc.
- Multimedia applications.
- Tutorial on Word including menus, drop-down menus, buttons, etc.
- Tutorials on Excel, Access and PowerPoint.
- LANs and WANs: how they work, protocols, servers, shared devices, etc.
- Creating a webpage and introduction to HTML and the Web.
- Security and privacy.
- Computer crimes and ethics.
- Viruses, spyware, firewalls and protection software.
- Using a software development process to solve a problem.
- Creating software program using a programming language.
- Software ownership.

Assignments/Projects/Laboratory Projects/Homework

- Three MS Word laboratory projects
- Two MS Excel laboratory projects
- Two-part MS Access laboratory project
- One MS PowerPoint laboratory project
- Creating a minimum single page website laboratory project
- One integration project to create a database and export to Excel, create a graph in Excel and export to Word and interpret the data

Curriculum Category Content (estimated in semester hours)

Area	Core	Advanced	Area	Core	Advanced
Algorithms	1		Data Structures	.5	
Software Design	1		Prog. Languages	.25	
Computer Arch.	4				

Relationship to Criterion 3 Outcomes

A	B	C	D	E	F	G	H	I	J	K
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Math Fundamentals:

Data Structures:

Fields, files and records (1 hr Access), joining tables (.5 hr Excess)

Algorithms and Software:

Analysis and Design (.5 analysis, 1 hr structured programming concepts)

Computer Organization and Architecture:

Parts of a computer, Peripherals, Processor families, Pipelining, Processor metrics, Raster and vector graphics (4 hrs)

Concepts of Programming Languages:

Syntax and semantics of an imperative language, uses of types of languages (2 hrs)

Social and Ethical Issues:

Security, computer crime, software piracy, privacy, digital divide, shareware, freeware, copyrighted software, social implications of use of technology, ergonomics, smart weapons, computer simulation, software agents (4 hrs.)

Oral Communication (presentations) – none

Written Communication:

Students prepare webpage consisting of 200 words using two links and scanned picture insertion, Power Point presentation on topic of their choosing with special effects (animation and/or transition).

Course Coordinator: Kathy Edgeworth

Last Modified: May 16, 2007