

Course Number: CSC 101

Course Title: Computers For Everyone

Number of Credits: 3

Schedule: Three hours of lecture/discussion per week.

Prerequisite: None

Catalog Description

Comprehensive and basic overview of computers and their use for everyday tasks like information retrieval, Internet, writing, presentations, communication, Web publishing, e-commerce, entertainment, computation. No prior knowledge required.

Expanded Description

Introduction to the concept of computing and basic/historical/advanced computers

History of computing and computers

Basic computer organization, file, folder, operating system, input devices

Using computers for email, various email client, instant messaging, VoIP

Using computers for writing, editors, word processors, PDF format, WYSIWYG

Using computers for presenting, MS PowerPoint, Multimedia presentation

Introduction to the world wide web, how it works, history, current issues

Basic web publishing, SeaMonkey's composer, Microsoft Word for writing a webpage, publishing using a ftp client

Introduction to the internet, how it works, history, current issues

Surfing the internet, using web browser, internet research, survey of useful internet services

Using computers for computing numbers, spread sheet applications

E-Commerce, product research, online shopping, online banking, financial management

Image and video with computers, photo editing, web cam, video creation, video editing, Movie maker, images and videos in web

Audio and music with computers, online music, internet radio, online sound clips, recording sounds, sound editing, Audacity

Digital and media arts, survey, comparison of traditional and contemporary computer arts

Computer and video games, survey

Advanced computer applications

Three guest speakers in applications for media, design, biology and medicine

Computer security, survey of security threads and their counter measures,

Library at SFSU, online book and journal catalogs, survey and tutorials for OASIS quizzes

Organization of computers, motherboard, buss systems, operating system, device drivers, BIOS, computer maintenance in Windows operating systems

How to buy and setup computers

Introduction to computer sciences, binary notation, hexadecimal notation, algorithm, computer language, programming, accuracy limitation due to finite sequence, Turing test

Introduction to computer science program at SFSU

Course Objectives and Role in Program

The objectives of this course include:

- Expose the student to computers and show how computers keep changing the way people think and live.
- Teach basic but comprehensive computer and information literacy: how computers work and how to effectively use computers to communicate, investigate, and create.
- Introduce Computer Science to the students, providing them opportunities for developing long-term interests in Computer Science.

Students will identify, propose, execute, and present investigative or creative term project that utilizes the computer and information literacy they learned during this course. This course plays an important role in increasing visibility and enrollment in the program by targeting non-CS majors and preparing them for higher-level courses in the program.

Learning Outcomes

At the end of this course students will

- Be comfortable using computers for everyday tasks
- Have basic understanding on how computer hardware and software work
- Effectively utilizes computer software for email (e.g., MS Outlook), presentation (e.g., MS Power Point), spreadsheet computation (e.g., MS excel), internet research and commerce, and basic web-publishing.
- Have basic understanding about practical/creative multimedia usage of computers

- Have basic understanding about historical/contemporary issues and advanced applications in computer and information technologies
- Propose a term project in one-page writing and present the results in class.

Method of Evaluation

Student learning will be evaluated on the basis of

- Completeness and quality of term project assignments.
- Grade on take-home assignments
- Grade on in-class quizzes
- Class attendance and participation.

The weight assigned to each element of evaluation will be determined by the instructor of the course on the first day of the class.

Required Textbooks

Miller, M., *Absolute Beginner's Guide to Computer Basics*.
Second Edition. Que Publishing, 2004.

Recommended Reference

Snyder, L., *Fluency with Information Technology: Skills, Concepts, and Capabilities*.
Second Edition, Paperback. ISBN: 0321357825, Addison Wesley, 2005.

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