

MASTER COURSE OUTLINE

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Date: January 2015

COURSE TITLE Intro to Computer Science

GENERAL COURSE INFORMATION

Dept.: CS CIP Code: 11.0901 Credits: 3 Total Contact Hrs Per Qtr.: 33 Lecture Hrs:33 Distribution Designation:

Intent Code: 11

Lab Hrs:

Course Num: 101

(Formerly:) Program Code: 527

Other Hrs:

COURSE DESCRIPTION (as it will appear in the catalog)

An introduction to computer science concepts and the role of computers in society. Topics include the history of computing, computer hardware, operating systems, the Internet, database management, an overview of programming languages, careers in computer technology, and the ethics of computing. This course is designed for Computer Science majors, and will emphasize principles and underlying computer technology concepts.

Note: This course's learner outcomes align to the common IT course, IT 110: Introduction to Information Technology, and is accepted as a transfer course with participating Washington State community and technical colleges. Look for this notation if transferring to another IT program at a Washington State community or technical college.

PREREQUISITES

None

TEXTBOOK GUIDELINES

Textbook to be determined by CS Faculty. (Example: Technology in Action; Evans, Martin,& Poatsy)

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or *skills*:

- 1. Summarize the evolution of computers and the computer industry and how business and private computer systems are likely to change in the future
- 2. Demonstrate how to use the Internet as a research tool
- 3. Demonstrate the ability to perform basic personal computer operations
- 4. Demonstrate basic knowledge of common software applications; i.e. word processing, spreadsheets, and presentation software
- 5. Describe the function of a database, and the differences between a file management and database management system
- 6. Demonstrate basic knowledge of computer hardware parts and systems
- 7. Describe system software, including the components, interfaces, and common operating systems
- 8. Explore digital data and digital devices
- 9. Describe what a program is, compare and contrast object-oriented and visual programming, and identify some traditional programming languages
- 10. Identify security and ethical issues related to computer use in business and society

11. Explore career opportunities and pathways in the computer and information technology industry and related fields

INSTITUTIONAL OUTCOMES

IO3 Human Relations/Workplace Skills: Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

COURSE CONTENT OUTLINE

- 1. The development of computers
- 2. The system unit and hardware
- 3. Using the Internet: the Web, Internet communications, and electronic commerce
- 4. Application software for personal and business use
- 5. System software: the operating system, utility programs, and file management
- 6. Networking fundamentals
- 7. Managing digital data and devices
- 8. System security and privacy
- 9. Survey of computer programming languages and structured programming
- 10. Databases and information systems
- 11. Networking and security in the business world
- 12. The management of the Internet
- 13. Careers in computers and information technology

DEPARTMENTAL GUIDELINES (optional)

DIVISION CHAIR APPROVAL

DATE