

**I. EFFECTIVE DATE OF OUTLINE**

Fall Semester, 2008. To be reviewed by the department annually.

**II. CATALOG DESCRIPTION**

- A. CSCI 1100
- B. Fundamentals of Computers
- C. 4 credits
- D. Offered Fall and Spring Semesters
- E. Prerequisite: none
- F. Overview of the computer system; the CPU and chip technology; input and output; storage devices; communications and networks; the Internet and World Wide Web; programming and languages; operating systems; applications software; security, privacy, and ethics; artificial intelligence, expert systems, and robotics; virtual reality; ergonomics; Windows; word processing; spreadsheets; database management systems; and presentation graphics.

**III. RECOMMENDED ENTRY SKILLS/KNOWLEDGE**

None.

**IV. OUTLINE OF MAJOR CONTENT AREAS**

- A. Overview of Computer System
- B. The CPU and Chip Technology
- C. Input and Output Devices
- D. Storage Devices
- E. Communications and Networks
- F. Programming and Languages
- G. Operating Systems
- H. Computers in the Workplace
- I. Workplace Security, Privacy, Ethics, Ergonomics
- J. Artificial Intelligence, Expert Systems, Robotics, Virtual Reality
- K. Windows
- L. Word Processing and Desktop Publishing
- M. Spreadsheets and Business Graphics
- N. Database Management Systems
- O. Presentation Graphics
- P. Internet and World Wide Web

**V. LEARNING OUTCOMES**

Upon successful completion of CSCI 1100, students will have:

- A. A general understanding of computer systems and how the computer is used in an information processing environment:
  - 1. HARDWARE - The Computer System, CPU and Chip Technology, Input, Output, and Storage Devices, Communications and Networks
  - 2. SOFTWARE - Programming and Languages, Operating Systems, Applications Software
  - 3. SOCIETY - Workplace Security, Privacy, Ethics, Ergonomics, Computers in the Workplace, Artificial Intelligence, Expert Systems, Robotics, Virtual Reality, Internet, World Wide Web
- B. Some experience as an end-user involving several popular software packages including the Windows environment; word processing and desktop publishing; electronic spreadsheets and business graphics; database management systems; presentation software; the Internet and the World Wide Web.

**VI. METHODS USED FOR EVALUATION OF STUDENT LEARNING**

The instructor will choose from among various evaluation techniques including – but not limited to – in-class testing, take-home testing, assignments, quizzes, attendance, group or individual projects, and research. The instructor will also choose a method for end-of-the-semester evaluation.