

## STANDARDIZED COURSE OUTLINE

### SECTION I

**SUBJECT AREA AND COURSE NUMBER:** CSC 101

**COURSE TITLE:** Introduction To Computers

**COURSE CATALOG DESCRIPTION:**

This course is designed primarily for students who intend to major in Computer Information Systems. It provides an understanding of basic computer concepts necessary for enrolling in more advanced CIS courses. General hardware and software concepts are covered. Students will learn to use the Windows operating system, to design and document computer solutions to problems, and to convert their logical designs into computer programs using a programming language. Microsoft Office products are generally NOT covered in this course. *Formerly listed as CIS 101, not open to students who have successfully completed CIS 101.*

**LECTURE HOURS PER WEEK:** 3

**CREDIT HOURS:** 3

**LAB HOURS PER WEEK (if applicable):** n/a

**PREREQUISITE(S):** n/a

### SECTION II

**A. SCOPE:**

This course focuses on a broad range of introductory computer concepts and skills, such as what a computer is, how it works, and what makes it a powerful tool. The course topics include the basics of: system unit components and hardware; system software and applications software; networking and communication principles; software development and the logic of program design; principles of programming and basic programming languages; the use of modern internet technology as an educational and professional tool; and economic, cultural, and ethical impacts of the computer on society.

**This course fulfills an Embedded Core Competency in the areas of: “Continuing Learning/Information Literacy (CL)” and “Appreciation of the Ethical Dimensions of Humankind (ED)”**

**B. REQUIRED WORK:**

Will vary by instructor. Students will be expected to do all required readings, assignments, tests, and quizzes as outlined by their instructor.

**C. ATTENDANCE AND PARTICIPATION:**

Regular attendance, assignment submission timeliness, promptness and class/lab participation will be expected. Instructors will include specific attendance and participation policies requirements in their class syllabi.

**D. METHODS OF INSTRUCTION:**

Methods may include any of the following: lecture, lecture/discussion, small group, collaborative learning, experimental/exploration, distance learning, student presentations, computer demonstrations, or use of technologies such as audio-visual materials, and computer laboratory equipment. Emphasis will be on hands-on computer exercises and problems.

## E. OBJECTIVES, OUTCOMES, and ASSESSMENT

Students' grades will be based on achievement of learning the objectives and outcomes listed below as measured by the instructor's methods of assessment:

<b>LEARNING OBJECTIVES</b>	<b>LEARNING OUTCOMES</b>	<b>ASSESSMENT METHODS</b>
<b>To demonstrate an understanding of:</b>	<b>Student will:</b>	<b>As measured by:</b>
System unit components and hardware	<ul style="list-style-type: none"> <li>a) Identify, define, and list examples of various computer components and terminology</li> <li>b) Identify the elements of an information system</li> <li>c) Identify and distinguish between input and output devices</li> <li>d) Identify and distinguish between storage and memory</li> </ul>	Homework assignments; Written and Oral activities; Quizzes/Exams; Online Computer Exercises
System software and applications software	<ul style="list-style-type: none"> <li>a) Distinguish between system software and application software</li> <li>b) List and describe different examples of operating systems</li> <li>c) List and describe various examples of business software</li> </ul>	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams
Networking and communication principles	<ul style="list-style-type: none"> <li>a) Describe different network types</li> <li>b) Describe different physical and logical network topologies</li> <li>c) List and describe examples of networking devices and protocols</li> </ul>	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams; Online Computer Exercises
Software development and the logic of program design	<ul style="list-style-type: none"> <li>a) Explain the system development process</li> <li>b) Apply the system development cycle to a real-world scenario (CL 1)</li> </ul>	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams
Principles of programming and basic programming languages	<ul style="list-style-type: none"> <li>a) List and describe examples of programming languages and tools</li> <li>b) Apply logical concepts to design and write a simple program to solve a real-world scenario (CL 1)</li> </ul>	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams
Modern Internet technology as an educational and professional tool	<ul style="list-style-type: none"> <li>a) Explain what the Internet is and the basics of how it works</li> <li>b) Utilize the Internet as a research tool for assignments and projects (CL 1, 2)</li> </ul>	Homework/Lab assignments; Written and Oral activities;
Economic, cultural, and ethical impacts of the computer on society	<ul style="list-style-type: none"> <li>a) Discuss various computer applications in society</li> <li>b) Discuss network security, ethics, and privacy issues (ED 1)</li> <li>c) Participate in group debates on ethical issues related to computer technologies including the use of technology and the access and use of information. Participation includes: critical analysis of an ethical issue; documentation of a defended position; oral defense of a position; response to an opposing position; and oral critique of the overall outcome of a group debate. (ED 1, 2, 4, CL 4)</li> </ul>	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams;

**Core Competency Assessment Artifact (s).**

Assignments from this course that address learning outcomes noted above may be collected to assess student learning across the school.

**F. TEXT(S) AND MATERIALS:**

An appropriate Overview of Computers text, such as: *Discovering Computers: A Gateway to Information (current edition)*, Course Technology.

**G. INFORMATION TECHNOLOGY:**

This course is an information technology course and will require extensive computer lab time both for teaching and performing assignments. Students will require network accounts with access to the Internet and various software applications as well as file storage space.