

CATALOG INFORMATION

Dept and Nbr: CIS 5

Title: COMPUTER LITERACY

Full Title: Computer Literacy

Last Reviewed: 5/8/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 175.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: BDP 5

**Catalog Description:**  
Designed for the transfer student and/or the person wanting a broad knowledge of computer concepts. No previous experience with computers is required or assumed. This course presents an overview of computers in our world today, how they work, how they are used and their impact on society. This course is primarily lecture with only a small portion of hands-on computer work. Lecture and scheduled lab required.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: An introduction to computers. Topics include: how computers work, how they are used and social issues. Provides limited hands-on experience. (Grade or P/NP)  
Prerequisites/Corequisites:  
Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;UC. (CAN CSCI2)

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>		Effective:	Inactive:
	B	Communication and Analytical Thinking	Fall 1983	
<b>CSU GE:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1983	Inactive:
<b>UC Transfer:</b>	Transferable	Effective:	Fall 1983	Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The students will:

1. Identify the components and function of the hardware used in a computer system.
2. Describe the function of an operating system.
3. Describe the function of a data communication system.
4. List the three levels of management and the types of decisions that are made at each level.
5. List at least one type of information system that is used at each level of management.
6. Given a computer magazine, the student will choose components and software to fit a specified application.
7. List the steps in systems analysis and design.
8. Describe the popular programming languages and the process of developing computer software.
9. Create a simple computer program.
10. Compare the three categories of computers, microcomputer, minicomputer and mainframe.
11. List the generations of computers and the invention that marked the change.
12. Analyze the impact on a society of the shift from Industry to Information as the main product.
13. Compare and contrast input devices.
14. Launch an application, load a file, make changes, save the file under a different name, print the file, and exit from application.
15. Distinguish between memory and storage.
16. Discuss types of viruses and the impact that computer viruses have on

business and personal use of computers.

17. List four ways to prevent computer viruses from infecting a computer system.

## **Topics and Scope:**

### **1. Computers in General**

#### **A. Hardware**

##### **1. Input**

- a. keyboard
- b. mouse
- c. touch screen
- d. pen based
- e. voice recognition
- f. scanners

##### **2. Output**

- a. printers
  - 1. dot matrix
  - 2. laser
  - 3. ink jet
  - 4. line printers
- b. Monitors
  - 1. resolution/pixels
  - 2. color
  - 3. EMF's

##### **3. Processing**

- a. CPU
  - 1. ALU
  - 2. Control Unit
  - 3. Registers
  - 4. Data Bus
  - 5. Power rating (MHz)

##### **4. Storage**

- a. Disks
- b. Tape
- c. CD-ROM
- d. Measurements
  - 1. bits
  - 2. bytes (Kilo, Mega, Gig, Tera)
  - 3. computer word
  - 4. ASCII, ANSI

##### **4. Memory**

- a. RAM
- b. RAM

#### **B. Software-hands on portion**

##### **1. Types and Uses**

- a. Operating System
- b. Word Processing
- c. Spreadsheets
- d. Database management
- e. Graphics

##### **2. Users**

- 3. Data
- 4. Other Peripherals
- C. Information Systems
  - 1. Levels of Management and the IS They Use
    - a. Transaction Processing Systems
    - b. Process Control
    - c. Management Information Systems
    - d. Decision Support Systems
    - e. Executive Information Systems
    - f. Office Automation Systems
  - 2. Systems Analysis and Design
    - a. Systems life cycle
    - b. Programming cycle
    - c. Programming languages
  - 3. Data Communication Systems
- D. System Software
  - 1. MS-DOS/System 7/Other operating systems
  - 2. Utilities
- E. Telecommunication
  - 1. Modems
  - 2. Networks
    - a. WAN
    - b. LAN
    - c. Internet
    - d. BBS's
    - e. Teleconferencing/Telecommuting
- F. Software Programming
  - 1. Languages
  - 2. Development Cycle
- G. Security
- H. Society
  - 1. Health
  - 2. Privacy
  - 3. Computer Crime
- I. The Future

**Assignment:**

- 1. Read approximately 30 pages per week from the textbook.
- 2. Answer questions that review recently-covered topics.
- 3. Complete laboratory exercises in operating systems and word processing, spreadsheets, database management, and other application software.
- 4. Develop and code a simple computer program.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, Reading reports, Essay exams, Term papers

Writing  
20 - 65%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Lab reports, Quizzes, Exams, LAB CHECKLISTS & EXERCISES

Problem solving  
5 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

PROJECTS

Skill Demonstrations  
5 - 20%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

Exams  
20 - 65%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

ATTENDANCE, CLASS PARTICIPATION

Other Category  
5 - 25%

### **Representative Textbooks and Materials:**

NATURE OF COMPUTERS by O'Brien, publisher: Dryden Press 1993