CS 5 Course Outline as of Fall 2024

CATALOG INFORMATION

Dept and Nbr: CS 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	1.00	4	Lab Scheduled	17.50
		Contact DHR	0		Contact DHR	0
		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: CIS 5

Catalog Description:
In this course, students will learn about a broad range of computer concepts, including an overview of computer and communication systems and their historical and societal impact.Topics include how computers work, how computers are put to work, technology ethics, capabilities and limitations of information technology, basic coding concepts, human-computer interaction, operating systems, and usage of productivity software and other tools to solve problems.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: In this course, students will learn about a broad range of computer concepts, including an overview of computer and communication systems and their historical and societal impact. Topics include how computers work, how computers are put to work, technology ethics,

capabilities and limitations of information technology, basic coding concepts, human-computer interaction, operating systems, and usage of productivity software and other tools to solve problems. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

			Effective:	Inactive:
AS Degree:	**Area**			
	B	Communication and Analytical Thinking	Fall 1983	
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:

CSU Transfer:	Transferable	Effective:	Fall 1983	Inactive:	
UC Transfer:	Transferable	Effective:	Fall 1983	Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Evaluate components, capabilities, and limitations of computer technology.
2. Critically assess the social and ethical implications of computer technology in daily life.
3. Explore the ability to solve real-world problems using computer-based technology and tools.

Objectives:
At the conclusion of this course, the student should be able to:
1. Identify the components and function of the hardware used in a computer system.
2. Describe the functions of system and application software.
3. Describe the popular programming languages and the process of developing computer software.
4. Create a simple computer program.
5. Analyze the impact of computer technology and its ethical implications on society.
6. Demonstrate understanding and basic use of communication and productivity tools.
7. Explain basic computer networking concepts and architecture.
8. Discuss computer security and ethics and explain their importance for business and personal use of computers.
9. Explore career opportunities in computer-related fields.

Topics and Scope:

XI. Software Programming
    A. The binary numbering system
    B. Low level programming languages
    C. High level programming languages
XII. Databases and Information Systems
    A. Database types
    B. Data mining and data warehouses
    C. The systems development lifecycle
    D. Systems analysis
XIII. Application Software
    A. Word-processing software
    B. Spreadsheet software
    C. Presentation software
    D. Database software
    E. Graphics and multimedia software
    F. Web design software

All items in the topics and scope are covered in the lecture and lab portions of the course.

Assignment:

1. Weekly reading from course materials (approximately 30 pages)
2. Written homework (5-15)
3. Reading report(s) (1-4)
4. Problem solving exercise(s) requiring the use of spreadsheets and database management software (1-3)
5. Laboratory exercise(s) (1-12) on topics such as:
    A. Operating systems
    B. Word processing
    C. Spreadsheets
    D. Database management
    E. Other application software
6. Individual and/or team projects (5-15), such as:
    A. Research and write-up of computer related articles on the web or technology magazines
    B. Interviews and reports
    C. Basic coding
    D. Team presentations on current trends in technology
7. Quizzes (2-15)
8. Midterm
9. Final exam or project

All assignments are covered in the lecture and lab portions of the course.

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 report(s); individual and/or team projects	Writing 20 - 65%

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

Problem solving exercise(s): laboratory exercise(s)	Problem solving 5 - 20%

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

Individual and/or team projects; final project	Skill Demonstrations 5 - 20%

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

Quizzes; midterm; final exam	Exams 20 - 65%

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

Attendance and participation	Other Category 5 - 15%

Representative Textbooks and Materials:
Technology In Action. 18th ed, Evans, Alan. Poatsy, Mary Anne. Martin, Kendall. Pearson. 2023.
Instructor-prepared materials