

CS 110A Course Outline as of Fall 2019**CATALOG INFORMATION**

Dept and Nbr: CS 110A Title: CODING FOR BEGINNERS

Full Title: Coding for Beginners

Last Reviewed: 9/10/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50

Total Student Learning Hours: 78.75

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 110A

Catalog Description:

This course is designed to teach basic computer programming concepts to anyone – no programming experience required. Using simple tools, students will learn the building blocks of computer programs in a stress-free environment. This introduction to coding will guide students through the process of creating simple programs, starting with graphical coding tools.

Prerequisites/Corequisites:**Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:**Schedule of Classes Information:**

Description: This course is designed to teach basic computer programming concepts to anyone – no programming experience required. Using simple tools, students will learn the building blocks of computer programs in a stress-free environment. This introduction to coding will guide students through the process of creating simple programs, starting with graphical coding tools.
(Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

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

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
---------------	----------------------	-------------------	------------------

CSU Transfer:	Effective:	Inactive:
----------------------	-------------------	------------------

UC Transfer:	Effective:	Inactive:
---------------------	-------------------	------------------

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

Approval and Dates

Version:	04	Course Created/Approved:	9/29/2003
Version Created:	7/23/2018	Course Last Modified:	12/30/2023
Submitter:	Donald Laird	Course last full review:	9/10/2018
Version Status:	Approved (Changed Course)	Prereq Created/Approved:	9/10/2018
Version Status Date:	9/10/2018	Semester Last Taught:	Fall 2023
Version Term Effective:	Fall 2019	Term Inactive:	

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Design and implement computer programs that employ basic computer programming concepts.

Objectives:

At the conclusion of this course, the student should be able to:

1. Describe the fundamental components of a computer program.
2. Create simple coding projects using drag-and-drop tools.
3. Understand the correct usage of conditionals, variables, and loops.

Topics and Scope:

- I. What is Coding/Programming
- II. The Fundamental Components of a Program
 - A. Conditionals
 1. When to use
 2. How to use conditionals
 - B. Variables

1. What are variables
 2. Variable types
 3. When to use
 4. How to use variables
- C. Loops
1. Different types of loop structures
 2. When to use
 3. How to implement loops
- III. Dealing with Input and Output
- A. Input
1. Button presses
 2. Keyboard input
 3. Sensor input
 - i. Motion
 - ii. Environmental
- B. Output
1. LEDs
 2. Screen
 3. Sounds
 4. Servos
- IV. Creating Subprograms

Assignment:

1. Read approximately 20 pages per week
2. Coding assignments (2 - 8)
3. Test and debug computer programs
4. One to three objective quizzes and/or examinations

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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing
0 - 0%

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

Computer programming assignments, including testing and debugging computer programs

Problem solving
50 - 70%

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

None

Skill Demonstrations
0 - 0%

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

Multiple choice, True/false, Matching items, Completion, Computer programming questions

Exams
20 - 40%

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

Participation and attendance

Other Category
0 - 10%

Representative Textbooks and Materials:

The Official BBC Micro:Bit User Guide. Halfacree, Gareth. Wiley. 2017

OTHER REQUIRED ELEMENTS

STUDENT PREPARATION

Matric Assessment Required:	E	Requires English Assessment
Prerequisites-generate description:	NP	No Prerequisite
Advisories-generate description:	A	Auto-Generated Text
Prereq-provisional:	N	NO
Prereq/coreq-registration check:	N	No Prerequisite Rules Exist
Requires instructor signature:	N	Instructor's Signature Not Required

BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction:	02	Lecture
	99	Credit by Exam
	71	Internet-Based, Simultaneous Interaction
	72	Internet-Based, Delayed Interaction
Area department:	CS	Computer Studies
Division:	72	Arts & Humanities
Special topic course:	N	Not a Special Topic Course
Program status:	2	Not Certificate/Major Applicable
Repeatability:	00	Two Repeats if Grade was D, F, NC, or NP
Repeat group id:		

SCHEDULING

Audit allowed:	N	Not Auditable
Open entry/exit:	N	Not Open Entry/Open Exit
Credit by exam:	Y	Credit by examination allowed
Budget code: Program:	0000	Unrestricted
Budget code: Activity:	0701	Computer & Information Science

OTHER CODES

Discipline:	Computer Information Systems	
Basic skills:	N	Not a Basic Skills Course
Level below transfer:	Y	Not Applicable
CVU/CVC status:	Y	Distance Ed, Not CVU/CVC Developed
Distance Ed Approved:	Y	Exclusively online or other technology based instruction
Emergency Distance Ed Approved:	Y	Fully Online
Credit for Prior Learning:	N	Agency Exam
	N	CBE
	N	Industry Credentials
	N	Portfolio
Non-credit category:	Y	Not Applicable, Credit Course
Classification:	Y	Career-Technical Education
SAM classification:	C	Clearly Occupational
TOP code:	0707.10	Computer Programming
Work-based learning:	N	Does Not Include Work-Based Learning
DSPS course:	N	Not a DSPS Course
In-service:	N	Not an in-Service Course