

**Course Outline**

**COURSE:** CSIS 10                      **DIVISION:** 50                      **ALSO LISTED AS:**

**TERM EFFECTIVE:** Spring 2017    **CURRICULUM APPROVAL DATE:** 04/25/2016

**SHORT TITLE:** BASIC PROGRAMMING

**LONG TITLE:** Introduction to Programming using BASIC

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
3	18	Lecture:	3	54
		Lab:	0	0
		Other:	0	0
		Total:	3	54

**COURSE DESCRIPTION:**

This course is an introduction to programming using BASIC. This course has the option of a letter grade or pass/no pass. **ADVISORY:** CSIS 1 or CSIS 2 or equivalent experience.

**PREREQUISITES:**

**COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

**GRADING MODES**

L - Standard Letter Grade

P - Pass/No Pass

**REPEATABILITY:** N - Course may not be repeated

**SCHEDULE TYPES:**

02 - Lecture and/or discussion

05 - Hybrid

72 - Dist. Ed Internet Delayed

**STUDENT LEARNING OUTCOMES:**

1. Design, implement, test, and debug a program that uses computation, simple I/O, standard conditional and iterative structures, and simple functions.

Measure: homework, programming assignments

PLO: 1

ILO: 7, 2

GE-LO:

Year assessed or anticipated year of assessment: 2016-2017

2. Choose appropriate primitive data types and data structures for a given problem.

Measure: homework, programming assignments

PLO: 1

ILO: 7, 3, 2

GE-LO:

Year assessed or anticipated year of assessment: 2016-2017

3. Identify fundamental programming concepts.

Measure: homework, programming assignments

PLO: 1

ILO: 7, 1, 3, 2

GE-LO:

Year assessed or anticipated year of assessment: 2016-2017

4. Apply program control structures.

Measure: homework, programming assignments

PLO: 1

ILO: 7

GE-LO:

Year assessed or anticipated year of assessment: 2016-2017

5. Choose appropriate test data, and use it to debug programs.

Measure: homework, programming assignments

PLO: 1

ILO: 7, 2

GE-LO:

Year assessed or anticipated year of assessment: 2016-2017

#### PROGRAM LEARNING OUTCOMES:

Student will be able to use a variety of business software, including word processors and spreadsheets to create business letters, reports and other business documents.

#### **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 04/25/2016

(6 hours) Program design. Compilers and interpreters. Using the IDE or other programming environment. Analysis of program requirements. Algorithms. Designing and modeling program structures. Modular design. HW: Read the chapter assignment. Enter and run a simple program in the programming environment.

(8 hours) Programming concepts. Coding and documenting programs. Using variables and literals. Types. HW: Read the chapter assignment. Write and run simple programs using variables and literals.

(8 hours) Expressions. Operators and operations. HW: Read the chapter assignment. Write, debug and run programs as assigned that use these concepts.

(15 hours) Decision logic. Looping.

HW: Read the chapter assignment. Write, debug and run programs as assigned that use these concepts.

(15 hours) Functions, Procedures, Sub-procedures, passing parameters.

HW: Read the chapter assignment. Write, debug, and run programs as assigned that use these concepts.

(2 hours) Final Exam

**METHODS OF INSTRUCTION:**

Lecture, computer demonstration, hands-on exercises and practice.

**METHODS OF EVALUATION:**

This is a degree-applicable course, but substantial writing assignments are NOT appropriate, because the course primarily:

Involves skill demonstrations or problem solving

The problem-solving assignments required:

Homework problems

Quizzes

Exams

The types of skill demonstrations required:

Class performance

Performance exams

The types of objective examinations used in the course:

Multiple choice

True/false

Matching items

Completion

Other category:

None

The basis for assigning students grades in the course:

Writing assignments: 0% - 0%

Problem-solving demonstrations: 30% - 70%

Skill demonstrations: 20% - 40%

Objective examinations: 10% - 40%

Other methods of evaluation: 0% - 0%

**REPRESENTATIVE TEXTBOOKS:**

Required:

Gaddis, T. & Irvine, K. Starting Out with Visual Basic 2012. Pearson, 2013. Or other appropriate college level text.

Reading level of text, Grade: 12+ Verified by: Venable

Other textbooks or materials to be purchased by the student: Quasney, QBasic Fundamentals and Style with an Introduction to Microsoft Visual Basic, Gavilan College custom edition

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200570

UC TRANSFER:

Transferable UC, effective 200570

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: CSIS

CSU Crosswalk Course Number: 10

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: C

Maximum Hours: 3

Minimum Hours: 3

Course Control Number: CCC000555845

Sports/Physical Education Course: N

Taxonomy of Program: 070710