# CSC 110: INTRODUCTION TO PROGRAMMING LOGIC FOR TEACHERS

## In Workflow

- 1. CSC Committee Chair (shaverdian@csus.edu;%20jouyang@csus.edu)
- 2. CSC Chair (faroughi@csus.edu)
- 3. ECS College Committee Chair (figgess@csus.edu)
- 4. ECS Dean (kevan@csus.edu)
- 5. Academic Services (torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Council on the Preparation of School Personnel Chair (mae.chaplin@csus.edu)
- 8. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 9. Dean of Graduate (cnewsome@skymail.csus.edu)
- 10. Catalog Editor (torsetj@csus.edu)
- 11. Registrar's Office (wlindsey@csus.edu)
- 12. PeopleSoft (PeopleSoft@csus.edu)

## **Approval Path**

- 1. Thu, 12 Nov 2020 17:52:40 GMT Anna Baynes (shaverdian): Approved for CSC Committee Chair
- 2. Wed, 18 Nov 2020 17:27:13 GMT Nikrouz Faroughi (faroughi): Approved for CSC Chair
- 3. Fri, 20 Nov 2020 17:22:48 GMT Gareth Figgess (figgess): Approved for ECS College Committee Chair
- Tue, 01 Dec 2020 21:32:52 GMT Kevan Shafizadeh (kevan): Approved for ECS Dean

## **New Course Proposal**

Date Submitted: Wed, 11 Nov 2020 15:07:23 GMT

## Viewing: CSC 110 : Introduction to Programming Logic for Teachers

## Last edit: Wed, 11 Nov 2020 15:07:22 GMT

Changes proposed by: Jun Dai (217393411) Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Jun Dai	jun.dai@csus.edu	916-278-5163

## **Catalog Title:**

Introduction to Programming Logic for Teachers

# Class Schedule Title:

Intro Program Logic Teachers

#### Academic Group: (College) ECS - Engineering & Computer Science

5 5 1

## Academic Organization: (Department)

**Computer Science** 

## Will this course be offered through the College of Continuing Education (CCE)?

Yes

## Please specify: CCE Only

Catalog Year Effective: Spring 2021 (2021/2022 Catalog)

#### Subject Area: (prefix)

CSC - Computer Science

## Catalog Number: (course number)

110

## Course ID: (For administrative use only.) TBD

Units:

3

## In what term(s) will this course typically be offered?

Fall, Spring, Summer

## Does this course require a room for its final exam?

Yes, final exam requires a room

### Does this course replace an existing experimental course? No

## This course complies with the credit hour policy:

Yes

## Justification for course proposal:

This course will be part of a proposed CCE-only program for current k-12 teachers to receive a specific or introductory authorization to teach computer science in k-12. The Commission on Teacher Credentialing has defined the subject matter necessary to earn this authorization. This is one of a set of courses being proposed for this program.

#### Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

An introduction to computer science with an emphasis on programming concepts and methodology. Intended to assist students with no programming experience to understand the basic principles of programming logic for computational thinking. Programming language is blocky-style. Topics include: computer devices and software, programming concepts and methodology, blocky-style programming, K-12 computer science curriculum development for introduction to computational thinking.

## Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Does this course have prerequisites? No

Does this course have corequisites? No

Graded:

Letter

**Approval required for enrollment?** No Approval Required

Course Component(s) and Classification(s): Discussion **Discussion Classification** 

CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)

**Discussion Units** 

3

Is this a paired course? No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: 'Students will be able to: 1), 2), etc.'

1. Describe a computing problem.

2. Analyze the input and output needs for a specified problem.

3. Identify the variables and control structures needed for a specified problem.

4. Explain how to decompose a complicated computing task into smaller parts.

5. Apply programming in blocky-style language like Flow and Scratch to solve a computing problem.

6. Design and analyze effective instruction, lesson plans, lab modules for K-12 students for introduction to programming logic.

7. Apply the understanding of the major core concepts and practices for frameworks and standards in Computer Science in California.

#### Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and posttests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

The following assessment strategies will be used:

1. Programming Activities (LO 1-6);

2. Mid-term Quiz and Final Exam (LO 1-6).

#### For whom is this course being developed?

Other

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

## **University Learning Goals**

## **Undergraduate Learning Goals:**

Competence in the disciplines Integrative learning Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

Yes

## For the Council for the Preparation of School Personnel (to be filled out with assistance of your department chair):

Does this course change impact your department's currently written Program Standards Document? No

Common Standards: In what way does this course or program change impact the currently written Common Standards document? Please include any suggested language changes:

N/A

Is this change in response to program or unit assessment activities?

No

Will this course introduce any new or changes to program assessments? No

## GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE? No

## Please attach any additional files not requested above:

CSc 110-Introduction to Programming Logic for Teachers.pdf

Key: 14277