CSC110 - Introduction To Computer Programming

Document Type:	Master Course Outline Supplemental
Proposal Type:	Revision
Requester(s):	Ravi Gandham
College:	South
Origination Approved:	05/15/2014 - 12:39 PM

BASIC INFORMATION

Requester(s):	Ravi Gandham
College:	South Seattle Community College
Division/Dept:	Academic Programs
Dean:	Laura Kingston
Peer Reviewer(s):	Loc H Nguyen
	Michael Steffancin

COLLEGE SUPPLEMENTAL

Proposed Quarter of Implementation:　　NA　　　　　☑ Request Provisional Exception

Fall'14 - Two sections of the hybrid versions of the class are planned for and scheduled to be offered in Fall'14.

Class Capacity:　　25

Modes of Delivery: (Check all that apply)
- ☑ Fully On Campus
- ☑ Fully Online
- ☑ Hybrid
- ☐ Other　　Explanation:

Select the Special Designation(s) this course will satisfy, if applicable:

(No Special Designations Selected)

Class Schedule Description:

An overview of computer program design and problem solving with a focus on problem analysis, program development, testing and debugging. Students will use decision and loop structures to develop a variety of programs to solve scientific and technical problems. Programming language used will be Python. Prereq: MATH 095 or MATH 098 with a 2.0 or higher. Computer fee.

Student Learning Outcomes:

Computation

Use arithmetic and other basic mathematical operations as required by program of study

Apply quantitative skills for academic and career purposes

Critical Thinking and Problem-Solving

Think critically in evaluating information, solving problems, and making decisions

Technology

Select and use appropriate technological tools for academic and career tasks

Personal Responsibility

Attend class regularly, complete assignments on time and effectively participate in classroom and online discussions, group work and other class-related projects and activities

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Program Outcomes:

SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1		Communication - Read and listen actively to learn and communicate.
SLO 1.2		Communication - Speak and write effectively for academic and career purposes.
SLO 2.1	2	Computation - Use arithmetic and other basic mathematical operations as required by program of study.
SLO 2.2	2	Computation - Apply quantitative skills for academic and career purposes.
SLO 3.1		Human Relations - Use social skills to work in groups effectively.
SLO 3.2		Human Relations – Have knowledge of the diverse cultures represented in our multicultural society.
SLO 4.1	1, 3	Critical Thinking—Think critically in evaluating information, solving problems, and making decisions.
SLO 5.1	5	Technology - Select and use appropriate technological tools for academic and career tasks.
SLO 6.1		Personal Responsibility – Uphold the highest standards of academic honesty and integrity.
SLO 6.2		Personal Responsibility – Respect the rights of others in the classroom, online, and in all other school activities.
SLO 6.3	4	Personal Responsibility – Attend class regularly, complete assignments on time, and effectively participate in classroom and online discussions, group work, and other class-related projects and activities.
SLO 6.4		Personal Responsibility – Abide by appropriate safety rules in laboratories, shops, and classrooms.
SLO 7.1		Information Literacy—Independently access, evaluate, and select information from a variety of appropriate sources.
SLO		Information Literacy – Have knowledge about legal and ethical

7.2		issues related to the use of information
SLO 7.3		Information Literacy - Use information effectively and ethically for a specific purpose.

Course Outcomes / Objectives:

Upon successful completion of this course, the student will be able to demonstrate the following:
1. An acquired knowledge of fundamental principles, themes, and issues central to the field of computer science.
2. Modern programming techniques and methods.
3. Applications of both the structured and object-oriented paradigms.
4. Ability to identify and classify control structures common to all programming languages.
5. Proficiency in writing programs using Python by understanding procedures and modular design, controlled repetition, arrays, sequential and random-access files, displaying data graphically, and an overview of the object-oriented paradigm.

Explain the student demand for the course and potential enrollment:

Offering this course as a hybrid and fully online offers students with a busy schedule the flexibility to work on the class when they have time. It also gives them opportunity to complete applied programming work online and develop an online community. The face to face component of the course, in a hybrid mode, allows for focused instruction and student engagement.

This course has been traditionally offered as a 50 minute daily course, which has limits for in-depth discussion or problem solving. Moving the course to hybrid and fully online gives time for sustained instruction, collaboration (e.g. discussion forum) and problem solving (quick tests and homeworks).

Explain why this course is being revised:

In part, this course is being revised to update course objectives with South's new SLOs and align prerequisites and programming language focus (Python) with the other CSC 110 courses in the district.

The change of mode revision is to offer this class as a hybrid course. The other courses in the series (CSC 142, 143) will also be offered in the hybrid and online mode. The curriculum of learning and practicing programming lends itself naturally to online instruction.

What challenges, if any, do you foresee in offering this course:

Currently, Canvas is used to enhance the face to face course; homework, instruction, resources, etc. are intergral to course delivery in Canvas. Offering the course in a hybrid or online mode is a natural approach for a computer programming course. Students will need to become familiar with this approach and Canvas to be successful in CSC 142 and CSC 143. Also, this course is taught in other institutions (e.g. SCCC, NSCC, Bellevue College, etc) in all modes. Students taking CSC courses have come to expect they will be taught using an LMS and the course will be offered as a hybrid and/or online course.

This is to certify that the above criteria have all been met and all statements are accurate to the best of my knowledge.

Faculty involved in originating this program:

Ravi Gandham	*Ravi Gandham*	1/1/0001
Print Name	**Signature**	**Date**

Dean:

Mark D Baumann (Admin)	*Mark D Baumann*	3/11/2014
Print Name	**Signature**	**Date**

Results of SSCC Curriculum Coordinating Council Findings

Participating Faculty Response and Remarks

[X] Recommended for approval

[ ] Not recommended for approval

Chairman, Curriculum Coordinating Council:

Diane Schmidt	*Diane Schmidt*	5/13/2014
Print Name	**Signature**	**Date**

Vice President for Instruction:

Donna Miller-Parker	*Donna Miller-Parker*	5/15/2014
Print Name	**Signature**	**Date**