

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2012, and finalized by the end of the fall semester to make the next catalog (2013-14) production

DATE (CHANGE DATE EACH TIME REVISED): 6/18/12; 11/21/12; GE11.26.12; REV 12.11.12

PROGRAM AREA(S): COMPUTER SCIENCE

Directions: All of sections of this form must be completed for course modifications. Use YELLOWED areas to enter data. All documents are stand alone sources of course information.

1. Indicate Changes and Justification for Each. [Mark all change areas that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]

- Course title, Prefix/suffix, Course number, Units, Staffing formula and enrollment limits, Prerequisites/Corequisites, Catalog description, Mode of Instruction, Course Content, Course Learning Outcomes, References, GE, Other Course justification, Reactivate Course

Justification: Prerequisite change better reflects the foundational knowledge needed for this course. The course is required for the BSIT. Added more general learning outcome.

2. Course Information.

[Follow accepted catalog format.] (Add additional prefixes if cross-listed)

OLD

Prefix COMP Course# 105
Title Computer Programming Introduction Units (3)
3 hours lecture per week
hours blank per week

X Prerequisites: COMP 101 or Consent of the Instructor

Consent of Instructor Required for Enrollment
Corequisites:

Catalog Description (Do not use any symbols):

Provides a balanced view of computing and provide an introduction to the world of computer science. In depth coverage of the design, development, and expression of algorithms. Covers a variety of concepts relevant to the beginning student, including computer organization and design. Not open to students who have completed COMP 150.

General Education Categories:

Grading Scheme (Select one below):

X A - F

Credit/No Credit

Optional (Student's Choice)

Repeatable for up to units

Total Completions

Multiple Enrollment in Same Semester Y/N

Course Level:

X Undergraduate

Post-Baccalaureate

Graduate

NEW

Prefix COMP Course# 105
Title Computer Programming Introduction Units (3)
3 hours lecture per week
hours blank per week

X Prerequisites: Passing score on Entry Level Mathematics examination

Consent of Instructor Required for Enrollment
Corequisites:

Catalog Description (Do not use any symbols):

Provides a balanced view of computing and provide an introduction to the world of computer science. In depth coverage of the design, development, and expression of algorithms. Covers a variety of concepts relevant to the beginning student, including computer organization and design. Not open to students who have completed COMP 150.

General Education Categories: B4

Grading Scheme (Select one below):

X A - F

Credit/No Credit

Optional (Student's Choice)

Repeatable for up to units

Total Completions

Multiple Enrollment in Same Semester Y/N

Course Level:

X Undergraduate

Post-Baccalaureate

Graduate

3. Mode of Instruction (Hours per Unit are defaulted)

Hegis Code(s) _____

(Provided by the Dean)

Existing

Proposed

	Units	Hours Per Unit	Benchmark Enrollment	Graded		Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture	<u>3</u>	<u>1</u>	<u>24</u>	y	Lecture	<u>3</u>	<u>1</u>	<u>24</u>	y	
Seminar		<u>1</u>			Seminar		<u>1</u>			
Lab		<u>3</u>			Lab		<u>3</u>			
Activity		<u>2</u>			Activity		<u>2</u>			
Field Studies					Field Studies					
Indep Study					Indep Study					
Other blank					Other blank					
Online					Online					

4. Course Attributes:

X **General Education Categories:** All courses with GE category notations (including deletions) must be submitted to the GE website: <http://summit.csuci.edu/geapproval>. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)

- A-1 Oral Communication
- A-2 English Writing
- A-3 Critical Thinking

B (Mathematics, Sciences & Technology)

- B-1 Physical Sciences
- B-2 Life Sciences – Biology
- B-3 Mathematics – Mathematics and Applications
- X B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

- C-1 Art
- C-2 Literature Courses
- C-3a Language
- C-3b Multicultural

D (Social Perspectives)

E (Human Psychological and Physiological Perspectives)

UDIGE/INTD Interdisciplinary

Meets University Writing Requirement

Meets University Language Requirement

American Institutions, Title V Section 40404: Government US Constitution US History

Refer to website, Exec Order 405, for more information: <http://senate.csuci.edu/comm/curriculum/resources.htm>

Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

Online Course (Answer YES if the course is ALWAYS delivered online).

5. Justification and Requirements for the Course. [Make a brief statement to justify the need for the course]

OLD

The course is an introductory Computer Science course for computer science and other students.

NEW

The course is an introductory Computer Science course for computer science and other students. It is a required course for the Information Technology degree

Requirement for the Major/Minor
 Elective for the Major/Minor
 Free Elective

X Requirement for the Major/Minor
 Elective for the Major/Minor
 Free Elective

Submit Program Modification if this course changes your program.

6. Student Learning Outcomes. (List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy: <http://senate.csuci.edu/comm/curriculum/resources.htm>. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).

Upon completion of the course, the student will be able to:

OLD

1. Organize and express computer programming ideas clearly in oral and written form.
2. Implement simple computer programs.
3. Design simple algorithms.
4. Implement simple computer program debugging techniques.
5. Explain concepts and issues in computing including computer terminology
6. Explain the foundations of computer science, software, and hardware, as well as the effects of computing on society.

Upon completion of the course, the student will be able to:

NEW

1. Organize and express computer programming ideas clearly in oral and written form.
2. Implement simple computer programs.
3. Design simple algorithms.
4. Implement simple computer program debugging techniques.
5. Explain concepts and issues in computing including computer terminology
6. Explain the foundations of computer science, software, and hardware, as well as the effects of computing on society.
7. Reason inductively and deductively (GE 2.1)

7. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary)

OLD

1. Data Representation and Organization
2. Components of a typical computer system
3. Introduction to Operating Systems and Networks
4. File systems
5. Algorithm Design and Problem Solving
6. Functions and Procedures
7. Computers and Society

NEW

1. Data Representation and Organization
2. Components of a typical computer system
3. Introduction to Operating Systems and Networks
4. File systems
5. Algorithm Design and Problem Solving
6. Functions and Procedures
7. Computers and Society

Does this course content overlap with a course offered in your academic program? Yes No X
If YES, what course(s) and provide a justification of the overlap.

Does this course content overlap a course offered in another academic area? Yes No X
If YES, what course(s) and provide a justification of the overlap.

Overlapping courses require Chairs' signatures.

8. Cross-listed Courses (Please note each prefix in item No. 1)

A. List cross-listed courses (Signature of Academic Chair(s) of the other academic area(s) is required).

B. List each cross-listed prefix for the course:

C. Program responsible for staffing:

9. References. [Provide 3-5 references]

OLD A Balanced Introduction to Computer Science (second edition), David Reed, Prentice Hall, 2008

A Web-based Introduction to Programming, Mike O'Kane, CAP, 2008

Invitation to Computer Science (5th edition), Michael Schneider & Judith Gersting, Course Technology, 2010

NEW A Balanced Introduction to Computer Science (second edition), David Reed, Prentice Hall, 2008

A Web-based Introduction to Programming, Mike O'Kane, CAP, 2008

Invitation to Computer Science (5th edition), Michael Schneider & Judith Gersting, Course Technology, 2010

10. Tenure Track Faculty qualified to teach this course.

All Computer Science faculty

11. Requested Effective Date or First Semester offered: Fall 2013

12. New Resource Requested: Yes No
If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

C. Facility/Space/Transportation Needs:

D. Lab Fee Requested: Yes No (Refer to the Dean's Office for additional processing)

E. Other.

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes No

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: **October 1, 2012** of preceding year.

Priority deadline for Course Proposals and Modifications: **October 15, 2012**.

Last day to submit forms to be considered during the current academic year: **April 15th**.

Peter Smith

6/18/12

Proposer(s) of Course Modification

Date

Type in name. Signatures will be collected after Curriculum approval.

Request Submitted

Course: COMP105 Computer Programming Introduction

Area: B4 Computers and Information Technology

Date Submitted: 8/26/2010 12:00:00 AM

Date Approved: 11/26/2012 10:30:16 AM

1. Promote the understanding and appreciation of the methodologies of math or science as investigative tools and the limitations of mathematical or scientific endeavors

Use of an algorithmic approach to problem solving.

Course covers notion of complexity and limitations of computers.

2. Present mathematical or scientific knowledge in a historical perspective and the influences of math and science on the development of world civilizations, both past and present

Influence of computers on society in the last 60 years from code-breaking during World War II to today's connected society.

3. Apply inductive and deductive reasoning processes and explore fallacies and misconceptions in the mathematical or scientific areas

Equivalence of recursive and iterative process is demonstrated. Non-computable functions are discussed.

4. Include use of computers or information technology to solve problems as appropriate

Extensive use of computers in solving problems throughout the course.

Approval Sheet

Course: COMP 105

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

General Education Chair		
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Signature

Date

Center for Intl Affairs Director		
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Signature

Date

Center for Integrative Studies Director		
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Signature

Date

Center for Multicultural Engagement Director		
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Signature

Date

Center for Civic Engagement and Service Learning Director		
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Signature

Date

Curriculum Chair		
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Signature

Date

AVP		
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Signature

Date