CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2014, and finalized by the end of the fall semester to make the next catalog (2015-16) production

DATE (CHANGE DATE EACH TIME REVISED): 10/14/2014, REV 2/4/15

PROGRAM AREA(S): COMPUTER SCIENCE COURSE NO: 105

Directions: All sections of this form must be completed. 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 | | | | | | |
|----|--|--|-----|---------|---------|--------------|--|
| | x C | ourse title | | Course | Conte | nt | |
| | x P | <mark>refix/suffix</mark> | | Course | Learn | ing Outcomes | |
| | | Course number | | Refere | nces | | |
| | | Units | x G | E | | | |
| | | Staffing formula and enrollment limits | | Other | | | |
| | | Prerequisites/Corequisites | | Reactiv | vate Co | ourse | |

Justification: COMP 105 is a required course in BSIT, and not having it listed as IT 105 is confusing to BSIT students; hence, a request to cross-list with IT. "Introduction to Programming" is grammatically superior to "Computer Programming Introduction." The lab component is necessary for increasing the hands-on experience critical in acquiring programming skills.

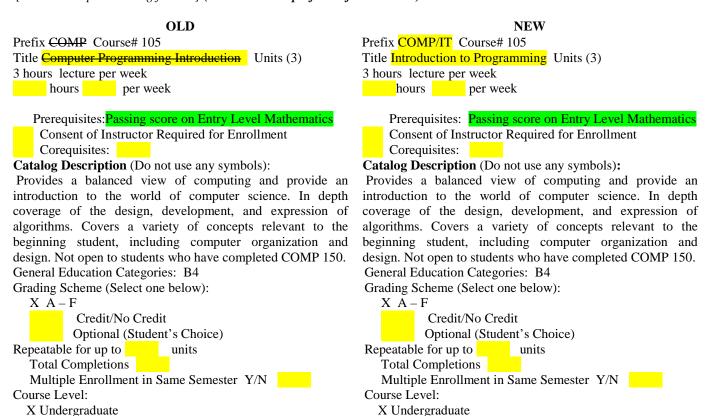
The GE Committee asked us to add another GE outcome to keep up with the new GE guidelines, so we have added one extra outcome.

(Please provide justification(s) for each marked item above). Be as brief as possible but use as much space as necessary.]:

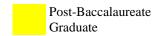
2. Course Information.

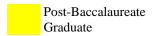
Catalog description X Mode of Instruction

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



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

Existing

| Hegis Code(s) | | | |
|---------------|--|--|--|

Proposed

(Provided by the Dean)

| | 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> | у | Lecture | <u>2</u> | <u>1</u> | <u>24</u> | <mark>y</mark> | |
| Seminar | | <u>1</u> | | | Seminar | | <u>1</u> | | | |
| Lab | | <u>3</u> | | | Lab | <u>1</u> | <u>3</u> | <mark>24</mark> | | |
| Activity | | <u>2</u> | | | Activity | | <u>2</u> | | | |
| Field Studies | | | | | Field Studies | | | | | |
| ndep Study | | | | | Indep Study | | | | | |
| Other blank | | | | | Other blank | | | | | |
| Online | | | | | Online | | | | | |

4. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: http://summit.csuci.edu/grupon.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 (Graduation Writing Assessment Requirement)

Meets University Language Requirement

American Institutions, Title V Section 40404: Government US Constitution US History Regarding 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. It is a required course for the Information Technology degree

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

X Requirement for the Major/Minor

X Requirement for the Major/Minor

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:

Upon completion of

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.
- 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

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.

3

7. Reason inductively and deductively (GE 2.1).

NEW

- 1. Data Representation and Organization
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| Does this course content overlap with a course offered in your academic program? If YES, what course(s) and provide a justification of the overlap. | Yes | | No X |
|---|-----|------|------|
| Does this course content overlap a course offered in another academic area? Yes If YES, what course(s) and provide a justification of the overlap. | | No X | |

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: COMP IT
 - C. Program responsible for staffing: Computer Science
- **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 CS faculty

- 11. Requested Effective Date or First Semester offered: Fall 2015
- 12. New Resource Requested: Yes No x If YES, list the resources needed.
 - A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

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| B. Library Needs (streaming media, video hosting, databases, exh | ibit space, etc.) |
|--|---|
| C. Facility/Space/Transportation Needs: | |
| D. Lab Fee Requested: Yes No (Refer to the Dean's E. Other. | Office for additional processing) |
| 13. Will this course modification alter any degree, credential, certificated If, YES attach a program update or program modification form for all propadline for New Minors and Programs: October 1, 2014. Deadline for Course Proposals and Modifications, and for Program Model Last day to submit forms to be considered during the current academic | programs affected. odifications: October 15, 2014. |
| AJ Bieszczad | 10/14/2014 |
| Proposer(s) of Course Modification Type in name. Signatures will be collected after Curriculum approval. | Date |
| GE Committee response to your request have COMP105: Computer Computers and Information Technology | Programmming Introduction added to B4: |
| New Learning Outcomes approved by GE Committee for area B4 wh COMP/IT 105 forwarded to Curriculum Committee for review. | nen cross-listing course with IT. |
| Course: COMP105 Computer Programmming Introduction Area: B4 Computers and Information Technology Date Submitted: 1 8:59:28 PM | .0/13/2014 11:58:34 PM Date Approved: 11/12/2014 |
| 1. Promote the understanding and appreciation of the methodological limitations of mathematical or scientific endeavors | es of math or science as investigative tools and the |
| 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 presp development of world civilizations, both past and present | pective and the influences of math and science on the |
| Influence of computers on society in the last 60 years from code-bro society. | eaking during World War II to today's connected |
| 3. Apply inductive and deductive reasoning processes and explore for scientific areas | allacies and misconceptions in the mathematical or |
| Equivalence of recursive and iterative process is demonstrated. Nor | n-computable functions are discussed. |
| 4. Include use of computers or information technology to solve prol | blems as appropriate |

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Extensive use of computers in solving problems throughout the course.

8.29.11 km2 5

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 | | | |
|---|-----------|------|--|
| | Signature | Date | |
| Program Chair | | | |
| | Signature | Date | |
| Program Chair | | | |
| | Signature | Date | |
| General Education Chair | | | |
| | Signature | Date | |
| Center for Intl Affairs Director | | | |
| | Signature | Date | |
| Center for Integrative Studies Director | | | |
| | Signature | Date | |
| Center for Multicultural Engagement Director | | | |
| | Signature | Date | |
| Center for Civic Engagement and Service Learning Director | | | |
| | Signature | Date | |
| Curriculum Chair | | | |
| | Signature | Date | |
| AVP | | | |
| | Signature | Date | |

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