CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

DATE: NOVEMBER 22, 2005
PROGRAM AREA COMPUTER SCIENCE

1. Catalog Description of the Course. [Follow accepted catalog format.]
   (If Cross-listed please submit a form for each prefix being modified)

   OLD
   Prefix COMP  Course# 105  Title Computer Programming
   Introduction  Units (3)
   3 hours per week
   ☐ Prerequisites
   ☐ Corequisites
   Description Three hours lecture in the lab per week. An introduction to the design, development and expression of algorithms including: algorithms and their stepwise refinement; expression of algorithms in a formal language. Not open to students who have completed COMP 150

   NEW
   Prefix COMP  Course# 105  Title Computer Programming
   Introduction  Units (3)
   3 hours lecture per week
   ☐ Prerequisites
   ☐ Corequisites
   Description Provides a balanced view of computing and provides 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.

   ☑ Gen Ed
   Categories B4
   ☐ Lab Fee Required
   ☑ A - Z units
   ☑ Repeatable for
   up to
   ☐ CR/NC
   ☑ Graded
   Gen Ed
   Categories B4
   Lab Fee Required
   A - Z units
   ☑ Repeatable for
   up to
   ☑ CR/NC
   ☑ Graded

2. Mode of instruction

   Existing
   Proposed

<table>
<thead>
<tr>
<th>Units</th>
<th>Hour Per Unit</th>
<th>Benchmark Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Activity</td>
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</tbody>
</table>

3. Course Content in Outline Form if Being Changed. [Be as brief as possible, but use as much space as necessary]

   OLD
   1. Stacks and Queues
   2. Components of a typical computer system
   3. Introduction to Operating Systems
   4. File systems
   5. Algorithm design.
   6. Functions and Procedures

   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

4. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

   OLD
   The course is an introductory Computer Science course for computer science and other students.
   Through this course, students will:
   1. Be able to organize and express computer programming ideas clearly in oral and written form.
   2. Be able to implement simple computer programs.

   NEW
   The course is an introductory Computer Science course for computer science and other students.
   Through this course, students will:
   1. Be able to organize and express computer programming ideas clearly in oral and written form.
   2. Be able to implement simple computer programs.
3. Be able to design simple algorithms.
4. Be able to use simple data structures including lists and arrays.
5. Be able to implement simple computer program debugging techniques.
6. Be able to organize and express ideas clearly and convincingly in oral and written forms.

This course is not designed to satisfy the University Writing or Language requirements.

5. References. [Provide 3-5 references on which this course is based and/or support it.]

OLD
A structured programming approach using C

NEW
see attached

6. Indicate Changes and Justification for Each. [Check all 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
☒ Course content
☐ References
☐ GE
☐ Other

Justification
Course broadened beyond programming to give a foundation to whole program. New catalog description better reflects the content of the course.

7. If this modification results in a GE-related change indicate GE category affected and Attach a GE Criteria Form:
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
☐ 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)
UD Interdisciplinary

8. New Resources Required. YES ☐ NO ☒
If YES, list the resources needed and obtain signatures from the appropriate programs/units on the consultation sheet below.

a. Computer (data processing), audio visual, broadcasting needs, other equipment

5/25/2004 cp
b. Library needs

c. Facility/space needs

9. Will this course modification alter any degree, credential, certificate, or minor in your program? YES ☐ NO ☑
   If, YES attach a program modification form for all programs affected.

Anna Bieszczad, Bill Wolfe 6/3/05
Proposer of Course Modification Date
Approvals

___________________________________________________
Program Chair     Date

___________________________________________________
Curriculum Committee Chair   Date

___________________________________________________
Dean       Date