CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS
COURSE MODIFICATION PROPOSAL
Courses must be submitted by October 15, 2010,
to make the next catalog (2011-12) production

DATE (CHANGE DATE EACH TIME REVISED): 6/7/10
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. **Course Information.**
   [Follow accepted catalog format.] (***Add additional prefixes i f cross-listed***)

OLD	NEW
Prefix COMP Course# 162 Title Computer Architecture and Assembly Language Units (3)	Prefix COMP Course# 162 Title Computer Architecture and Assembly Language Units (3)
3 hours lecture per week	3 hours lecture per week
____ hours blank per week	____ hours blank per week
X Prerequisites: COMP 150	X Prerequisites: COMP 150
____ Consent of Instructor Required for Enrollment	____ Consent of Instructor Required for Enrollment
____ Corequisites: ____	____ Corequisites: ____
Catalog Description (Do not use any symbols): An introduction to computer architecture, assembly language programming, system software and computer applications. Topics include: number systems and data representation; internal organization of a computer; primitive instructions and operations; Assembly language; language translation principles; overview of operating systems.	**Catalog Description** (Do not use any symbols)**:** An introduction to computer architecture, assembly language programming, system software and computer applications. Topics include: number systems and data representation; internal organization of a computer; primitive instructions and operations; Assembly language; language translation principles; overview of operating systems.

OLD

General Education Categories ____   Graded ____   ____ Repeatable for up to ____ units
____ Lab Fee Requested   CR/NC
                             X A - F   Total Completions ____
Course Level: ____   ____ Multiple Enrollment in same semester
X Undergraduate   Optional (Student's choice)
____ Post-bac/Credential
____ Graduate

NEW

General Education Categories ____   Graded ____   ____ Repeatable for up to ____ units
____ Lab Fee Requested   CR/NC
                             X A - F   Total Completions ____
Course Level: ____   ____ Multiple Enrollment in same semester
X Undergraduate   Optional (Student's choice)
____ Post-bac/Credential
____ Graduate

2. **Mode of Instruction (Hours per Unit are defaulted)**   **Hegis Code(s)**_____
                                                                 (Provided by the Dean)

Existing

	Units	Hours Per Unit	Benchmark Enrollment	Graded
Lecture	**3**	**1**	**24**	y
Seminar	____	**1**	____	____
Lab	____	**3**	____	____
Activity	____	**2**	____	____
Field Studies	____		____	____
Indep Study	____		____	____
Other blank	____		____	____

Proposed

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

3. **Course Attributes:**

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)
  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).

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

OLD	NEW
The course is a required course for Computer Science majors according to accreditation guidelines.	The course is a required course for Computer Science majors according to accreditation guidelines.
X Requirement for the Major/Minor	X Requirement for the Major/Minor
Elective for the Major/Minor	Elective for the Major/Minor
Free Elective	Free Elective

  Submit Program Modification if this course changes your program.

5. **Student Learning Outocmes.** (List in numerical order. You may wish to visit resource information at the following website: http://senate.csuci.edu/comm/curriculum/resources.htm)

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

OLD	NEW
Recognize the main components of a computer system	Recognize the main components of a computer system
• Determine suitable machine-level representation of data objects	• Determine suitable machine-level representation of data objects
• Implement algorithms in assembly language	• Implement algorithms in assembly language
• Discuss the fundamental role of an operating system	• Describe the fundamental role of an operating system
• Translate between high-level and low-level languages	• Translate between high-level and low-level languages
• Organize and express ideas clearly and convincingly in oral and written forms.	• Organize and express ideas clearly and convincingly in oral and written forms.

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

OLD	NEW
History of Computing	History of Computing
Components of a typical computer system	Components of a typical computer system
Representation of information	Representation of information
The Pep/7 architecture	The Pep/7 architecture

Pep/7 assembly language	Pep/7 assembly language
Representation of control structures	Representation of control structures
Representation of data structures	Representation of data structures
Languages, grammars and the parsing problem	Languages, grammars and the parsing problem
Operating system topics	Operating system topics
Floating point	Floating point
Computer arithmetic	Computer arithmetic

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.

7. **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:** ▮
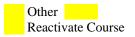
8. **References.** *[Provide 3-5 references]*

   OLD Warford *Computer Systems*, Second Edition, Jones and Bartlett 2002 ISBN 0763716332
Salomon, Assemblers and Loaders, Prentice-Hall, 1993
Bryant and O'Halloron, *Computer Systems: a programmer's perspective*, Prentice-Hall (2003) ISBN 013034074X

NEW Warford *Computer Systems*, Fourth Edition, Jones and Bartlett 2010 ISBN976-0-7637-7144-7
  Salomon, Assemblers and Loaders, Prentice-Hall, 1993
  Bryant and O'Halloron, *Computer Systems: a programmer's perspective*, Second Edition,
  Prentice-Hall (2010) ISBN 978-0-13-610804-7

9. **Tenure Track Faculty qualified to teach this course.**
    All Computer Science faculty

10. **Requested Effective Date or First Semester offered: Fall 2011**

11. **New Resource Requested: Yes** ▮   **No** X
   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.** ▮

12. **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	▮	Course Content
▮	Prefix/suffix	X	Course Learning Objectives
▮	Course number	X	References
▮	Units	▮	GE

Staffing formula and enrollment limits   Other
Prerequisites/Corequisites   Reactivate Course
Catalog description
Mode of Instruction

    Justification: Learning outcome rewritten to make it assessable. References updated.

13. **Will this course modification alter any degree, credential, certificate, or minor in your program? Yes   No X**
    If, YES attach a program update or program modification form for all programs affected.
    Priority deadline for New Minors and Programs: October 4, 2010 of preceding year.
    Priority deadline for Course Proposals and Modifications: October 15, 2010.
    Last day to submit forms to be considered during the current academic year: April 15th.

Peter Smith   6/7/10
_____   _____
Proposer(s) of Course Modification   Date
Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: COMP 162

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.

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

Dean of Faculty		
	Signature	Date