CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2011, and finalized by the end of the fall semester to make the next catalog (2012-13) production

DATE (CHANGE DATE EACH TIME REVISED): 9/8/11 REV. 10/3/11; REV 10.20.11; REV 11.4.11; REV 2.2.12

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.

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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
- X Prerequisites/Corequisites
- Catalog description
- X Mode of Instruction
- Course Content
- Course Learning Outcomes
- References
- GE
- X Other Justification
- Reactivate Course

Justification: An alternative, equivalent pre-requisite is added because of changes to the BSIT

2. Course Information.

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

OLD

Prefix COMP Course# 162
Title Computer Architecture and Assembly Language Units (3)
2 hours lecture per week
3 hour laboratory per week

X Prerequisites: COMP 121 or COMP 150
Consent of Instructor Required for Enrollment
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

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# 162
Title Computer Architecture and Assembly Language Units (3)
2 hours lecture per week
3 hour laboratory per week

X Prerequisites: COMP 105 or COMP 121 or COMP 150
Consent of Instructor Required for Enrollment
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

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

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	2	1	24	y	2	1	24	y	
Seminar		1				1			
Lab	1	3	30	y	1	3	24	y	
Activity		2				2			
Field Studies									
Indep Study									
Other blank									
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/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
- 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).

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

OLD
The course is a required course for Computer Science majors according to accreditation guidelines.

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

NEW
The course is a required course for Computer Science majors according to accreditation guidelines. The course is a required course for the BSIT

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. 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

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

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

NEW

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

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

OLD

History of Computing
Components of a typical computer system
Representation of information
The current architecture
Current assembly language
Representation of control structures
Representation of data structures
Languages, grammars and the parsing problem
Operating system topics
Floating point
Computer arithmetic

NEW

History of Computing
Components of a typical computer system
Representation of information
The current architecture
Current assembly language
Representation of control structures
Representation of data structures
Languages, grammars and the parsing problem
Operating system topics
Floating point
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.

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 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

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Prentice-Hall (2010) ISBN 978-0-13-610804-7

10. Tenure Track Faculty qualified to teach this course.
All Computer Science faulty

11. Requested Effective Date or First Semester offered: Fall 2012

12. 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.

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 1, 2011 of preceding year.
Priority deadline for Course Proposals and Modifications: October 15, 2011.
Last day to submit forms to be considered during the current academic year: April 15th.

Peter Smith — 10/3/11

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.

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 Multicultural Engagement Director		
	Signature	Date
Center for Civic Engagement and Service Learning Director		
	Signature	Date
Curriculum Chair		
	Signature	Date
AVP		
	Signature	Date