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): 6/14/10; REV 9.20.10

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.

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1. **Course Information.**

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

OLD	**NEW**
Prefix COMP Course# 362 Title Operating Systems Units (4)	Prefix COMP Course# 362 Title Operating Systems Units (4)
3 hours lecture per week	3 hours lecture per week
3 hours laboratory per week	3hours laboratory per week
X Prerequisites: COMP 262	X Prerequisites: Comp 262
☐ Consent of Instructor Required for Enrollment	☐ Consent of Instructor Required for Enrollment
☐ Corequisites:	☐ Corequisites:

OLD

Catalog Description (Do not use any symbols):
Examination of the principal types of systems including batch, multiprogramming, and time-sharing. Networked systems are also discussed. The salient problems associated with implementing systems are considered including interrupt or event driven systems, multi-tasking, storage and data base management, and input-output. Emphasis will be placed on some of the simple algorithms used to solve common problems encountered such as deadlocks, queue service, and multiple accesses to data. Projects will be implemented to reinforce the lectures

NEW

Catalog Description (Do not use any symbols)**:**
Examination of the principal types of systems including batch, multiprogramming, and time-sharing. Networked systems are also discussed. The salient problems associated with implementing systems are considered including interrupt or event driven systems, multi-tasking, storage and data base management, and input-output. Emphasis will be placed on some of the simple algorithms used to solve common problems encountered such as deadlocks, queue service, and multiple accesses to data. Projects will be implemented to reinforce the lectures
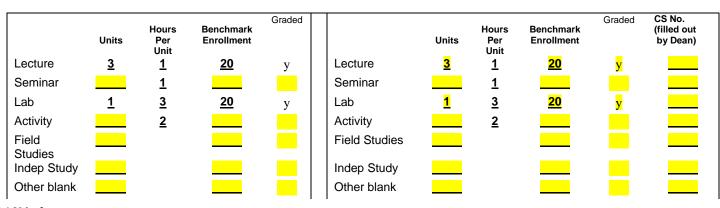
OLD

General Education Categories ☐

Graded ☐

Lab Fee Requested ☐   X A - F

☐ Repeatable for up to ☐ units   Total Completions ☐

Course Level:
X Undergraduate
☐ Post-bac/Credential
☐ Graduate

☐ Optional (Student's choice)

☐ Multiple Enrollment in same semester

NEW

General Education Categories ☐

Graded ☐

Lab Fee Requested ☐   X A - F

☐ Repeatable for up to ☐ units   Total Completions ☐

Course Level:
X Undergraduate
☐ Post-bac/Credential
☐ Graduate

☐ Optional (Student's choice)

☐ Multiple Enrollment in same semester

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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**	**20**	y
Seminar		**1**		
Lab	**1**	**3**	**20**	y
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**	**20**	y	
Seminar		**1**			
Lab	**1**	**3**	**20**	y	
Activity		**2**			
Field Studies					
Indep Study					
Other blank					

3. 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).

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

OLD	NEW
This course is a required course for Computer Science majors according to accreditation guidelines	This course is a required course for Computer Science majors according to accreditation guidelines

OLD		NEW	
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 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
- Discuss the role of modern operating systems
- Design co-operating sequential processes
- Explain the interaction between hardware and software
- Organize and express ideas clearly and convincingly in oral and written forms.

NEW
- Describe the role of modern operating systems
- Design co-operating sequential processes
- Explain the interaction between hardware and software
- Synthesize and articulate 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
Introduction to Operating Systems	Introduction to Operating Systems

Processes and Threads	Processes and Threads
Critical sections	Critical sections
Deadlock	Deadlock
CPU scheduling	CPU scheduling
Memory management	Memory management
File systems	File systems
Networks	Networks
Protection and Security	Protection and Security

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 Siberschatz, Galvin and Gagne, Operating System Concepts, Wiley, 2008. ISBN 0470128725
Bovet and Cesati, Understanding the Linux kernel, 2nd edition (2002) O'Reilly ISBN 0596002130
Robbins and Robbins Unix System Programming, Prentice-Hall, 2003, ISBN 0130424110
Stevns, Rago Advanced Programming in the Unix Environment, Pearson Education 2005, ISBN 021433079
Rehkind, Advanced Unix Programming, Pearson Education 2004, ISBN 0131411543
Molay, Understanding Unix/Linux Programming, Pearson Education 2003, ISBN 0130083968

NEW Siberschatz, Galvin and Gagne, Operating System Concepts, Wiley, 2008. ISBN 0470128725
Bovet and Cesati, Understanding the Linux kernel, 2nd edition (2002) O'Reilly ISBN 0596002130
Robbins and Robbins Unix System Programming, Prentice-Hall, 2003, ISBN 0130424110
Stevns, Rago Advanced Programming in the Unix Environment, Pearson Education 2005, ISBN 021433079
Rehkind, Advanced Unix Programming, Pearson Education 2004, ISBN 0131411543
   Molay, Understanding Unix/Linux Programming, Pearson Education 2003, ISBN 0130083968

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

Justification: Outcome reworded to make it assessable

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   6/14/10

_____   _____

Proposer(s) of Course Modification   Date

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

Approval Sheet

Course: COMP 362

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