

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): 6/14/10; 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.

1. Course Information.

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

OLD

Prefix COMP Course# 420 Title Database Theory and Design Units (3)
 3 hours lecture per week
 hours blank per week

X Prerequisites: MATH 300 or MATH 301
 Consent of Instructor Required for Enrollment
 Corequisites:

Catalog Description (Do not use any symbols): Database structure including: structure definition, data models, semantics of relations, and operation on data models. Database schemas: element definition, use and manipulation of the schema. Elements of implementation. Algebra of relations on a database. Hierarchical data bases. Discussion of information retrieval, reliability, protection and integrity of databases.

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

NEW

Prefix COMP Course# 420 Title Database Theory and Design Units (3)
 3 hours lecture per week
 hours blank per week

X Prerequisites: MATH 300 or MATH 301 and Comp 151
 Consent of Instructor Required for Enrollment
 Corequisites:

Catalog Description (Do not use any symbols): Database structure including: structure definition, data models, semantics of relations, and operation on data models. Database schemas: element definition, use and manipulation of the schema. Elements of implementation. Algebra of relations on a database. Hierarchical data bases. Discussion of information retrieval, reliability, protection and integrity of databases.

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

2. 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	3	1	24	y	Lecture	3	1	24	y	
Seminar		1			Seminar		1			
Lab		3			Lab		3			
Activity		2			Activity		2			
Field Studies					Field Studies					
Indep Study					Indep Study					
Other blank					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

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

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

NEW

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

1. Identify the components of a database system.
2. Represent information in the form of tables, records, and fields.
3. Be able to construct Entity Relation diagrams.
4. Be able to analyze and implement basic sql queries.
5. Be able to integrate a database with a programming language.
6. Identify and represent system constraints.
7. Organize and express ideas clearly and convincingly in oral and written forms.

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

NEW

1. Identify the components of a database system.
2. Represent information in the form of tables, records, and fields.
3. Construct table design diagrams.
4. Analyze and implement basic sql queries.
5. Integrate a database with a programming language.
6. Identify and represent system constraints.
7. 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

1. Components of a Database System.

NEW

1. Components of a Database System.

2. Representation of Constraints.
3. Tables, Records and Fields.
4. Integrity Constraints.
5. Entity Relation (ER) Diagrams.
6. Table Unions and Joins.

2. Representation of Constraints.
3. Tables, Records and Fields.
4. Integrity Constraints.
5. Entity Relation (ER) Diagrams.
6. Table Unions and Joins.

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 Fundamentals of Database Systems, Ramez Elmasri , Addison Wesley, 2002, 0-201-74153-9

NEW Fundamentals of Database Systems, Ramez Elmasri , Addison Wesley, 2002, 0-201-74153-9

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.]*

- | | |
|--|--|
| <input type="checkbox"/> Course title | <input type="checkbox"/> Course Content |
| <input type="checkbox"/> Prefix/suffix | <input checked="" type="checkbox"/> X Course Learning Objectives |
| <input type="checkbox"/> Course number | <input type="checkbox"/> References |
| <input type="checkbox"/> Units | <input type="checkbox"/> GE |
| <input type="checkbox"/> Staffing formula and enrollment limits | <input type="checkbox"/> Other <input type="text"/> |
| <input checked="" type="checkbox"/> X Prerequisites/Corequisites | <input type="checkbox"/> Reactivate Course |
| <input type="checkbox"/> Catalog description | |
| <input type="checkbox"/> Mode of Instruction | |

Justification: Until there are sufficient IT majors, we cannot offer IT420; we allow IT majors to take COMP 420 instead.

We removed COMP 350 as a prerequisite because IT majors are not required to take it. Unfortunately, students are now attempting to enroll without having completed the Data Structures class that was a pre-requisite to COMP 350. Knowledge of data structures is essential when studying Databases. The change restores a Data Structures pre-requisite.

Reworded learning outcome to make it more general.

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes ☐ No ☐

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 420

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		
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Signature

Date

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

General Education Chair		
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Signature

Date

Center for Intl Affairs Director		
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Signature

Date

Center for Integrative Studies Director		
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Signature

Date

Center for Multicultural Engagement Director		
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Signature

Date

Center for Civic Engagement and Service Learning Director		
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Signature

Date

Curriculum Chair		
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Signature

Date

Dean of Faculty		
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Signature

Date