



# Academic Affairs - Course Proposal Form

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

<b>Academic Unit:</b> Computer Science		<b>Department Chair:</b> Du Zhang	
<b>Type of Course Proposal:</b> New ___ Change <u>X</u> Deletion ___		<b>Date:</b> December, 14, 2005	
<b>Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u></b>		<b>For Catalog Copy: Yes <u>X</u> No ___</b>	<b>CCE: Yes ___ No <u>X</u></b>
		<b>Semester Effective: Fall <u>x</u> Spring ___ 200<u>6</u></b>	
<b>Prefix &amp;No.</b> CSC 244	<b>Title:</b> Data Base Design		<b>Units:</b> 3

**Change to:**

<b>Prefix &amp;No.</b>	<b>Title:</b> Database System Design	<b>Units:</b>
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**JUSTIFICATION:**

CSC 244 covers theories, design, and implementation of database management systems, rather than design of databases. The proposed title better reflects the content of the course.

**NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy.)**

See <http://www.csus.edu/acaf/univmanual/crspsl.htm> - Guidelines for Catalog Course Description

Topics in the design and implementation of database management systems. Database system concepts and architectures; query compiler, query processing algorithms, logical and physical query plans, query optimization; recovery, concurrency control; transaction management in centralized database management systems and distributed database management systems. Also exploration of current research directions, issues, and results related to databases and data management.

**Note:**

**Prerequisite:** CSC 174 or CSC 204.

**Corequisite:**

**CAN (California Articulation Number):**

**Graded:** Letter X Credit/No Credit \_\_\_ **Instructor Approval?** Yes \_\_\_ No X

**Course Classification:** 05 **Title for SIS+ (not more than 25 characters)**  
Database System Design

**Cross Listed?** Yes \_\_\_ No X **If yes, with what course:**

**How Many Times Can This Course be Taken for Credit?** Once

# FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

**Description of the Expected Learning Outcomes:** Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at <http://www.csus.edu/acaf/example.htm>

Students will be able to:

- 1) thoroughly understand query execution algebra and algebraic laws for improving query plan,
- 2) thoroughly understand one-pass and two-pass query processing algorithms,
- 3) thoroughly understand cost-based plan selection,
- 4) thoroughly understand database recovery techniques,
- 5) thoroughly understand concurrency control techniques,
- 6) understand the basic concepts of distributed databases,
- 7) understand the basic concepts of distributed transaction management issues.

\*\*Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

**Assessment Strategies:** A description of the assessment strategies (e.g., portfolios, examinations, performances, pre- and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

Midterm examination, final examination, laboratory assignments, student papers and presentations on recent research issues.

## For whom is this course being developed?

Majors in the Dept  Majors of other Depts \_\_\_ Minors in the Dept \_\_\_ General Education \_\_\_ Other \_\_\_

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes \_\_\_ No

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes \_\_\_ No

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). \_\_\_\_\_

*The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.*

**Approvals:** If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

## Signatures:

Date

Department Chair:	
College Dean or Associate Dean:	
CPSP (for school personnel courses ONLY)	
Director of Curriculum, Assessment & Accreditation (for the Vice President for Academic Affairs)	

**Distribution:** Academic Affairs (original and two copies) Department Chair and College Dean. A copy of this form should also be e-mailed, as an attachment, to Academic Affairs by the Dean's office after it is approved at that level.