Course Change Proposal
Form A

Academic Group (College): Engineering and Computer Science
Academic Organization (Department): Computer Science
Date: October 12, 2006

Type of Course Proposal:
New ___ Change _X__ Deletion ___

Department Chair: Du Zhang
Submitted by: Bill Mitchell

Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No _X__
For Catalog Copy: Yes _X__ No ___
CCE: Yes ___ No _X__
Semester Effective: Fall ___ Spring _X__, 2007___

This course replaces experimental course Subject Area (prefix) and Catalog Number (course number):

This Catalog Number (course number) is being replaced:

Change from:
Subject Area & Catalog No.: CSC 204
Title: Data Models for Database Management Systems
Units: 3

Change to:
Subject Area (prefix) & Catalog No. (course no.): Title:  Units:

JUSTIFICATION:
Catalog description is being updated to reflect current content.

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

Database management system (DBMS) architecture; database file organizations and access methods; the relational model and relational algebra; SQL query language; introduction to query optimization; concurrent transaction processing and backup and recovery; applications using embedded SQL, object types, and stored procedures; database analysis and design notations: EER, UML, and XML; web database environments; database security and administration throughout course. Not intended for students who have completed CSC 174.

Note:
Prerequisite: Fully classified graduate status in Computer Science or Software Engineering.
Corequisite:

CAN (California Articulation Number):

Graded: Letter _X__ Credit/No Credit____
Instructor Approval Required? Yes___ No_X__

Course Classification: Seminar (05)
Title for SIS+/CMS (not more than 30 characters)
DATA MODEL DATA MGT SYSTEM

Cross Listed?
Yes ___ No _X__
If yes, do they meet together and fulfill the same requirement, and what is the other course.

How Many Times Can This Course be Taken for Credit? ___1___

Can the course be taken for Credit more than once during the same term? Yes ___ No _X__
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 have:
- Learned the architecture of a modern DBMS.
- Studied relational database physical access methods.
- Studied and programmed RA, the SQL query language, and application programming database access.
- Learned the fundamentals of transaction processing, database backup, and database recovery.
- Constructed analysis and design representations of database entities, relationships and relational model constraints.
- Developed familiarity with database environments containing Internet and web processing.

**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:

Laboratory assignments, examinations.

**For whom is this course being developed?**

Majors in the Dept _X___ 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 _X___ No ___

If yes, identify program(s): MS in Computer Science

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 _X___

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:**

<table>
<thead>
<tr>
<th>Department Chair:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Dean or Associate Dean:</td>
<td></td>
</tr>
<tr>
<td>CPSP (for school personnel courses ONLY)</td>
<td></td>
</tr>
<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
<td></td>
</tr>
</tbody>
</table>

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean’s office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.