

# CSC 134: DATABASE MANAGEMENT SYSTEMS

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## In Workflow

1. CSC Committee Chair (shaverdian@csus.edu;%20jouyang@csus.edu)
2. CSC Chair (faroughi@csus.edu)
3. ECS College Committee Chair (figgess@csus.edu)
4. ECS Dean (kevan@csus.edu)
5. Academic Services (torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
8. Dean of Graduate (cnewsome@skymail.csus.edu)
9. Catalog Editor (torsetj@csus.edu)
10. Registrar's Office (w lindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

## Approval Path

1. Thu, 01 Oct 2020 17:02:17 GMT  
Anna Baynes (shaverdian): Approved for CSC Committee Chair
2. Thu, 01 Oct 2020 17:55:59 GMT  
Nikrouz Faroughi (faroughi): Approved for CSC Chair
3. Mon, 12 Oct 2020 21:51:48 GMT  
Gareth Figgess (figgess): Rollback to CSC Committee Chair for ECS College Committee Chair
4. Mon, 12 Oct 2020 22:33:17 GMT  
Anna Baynes (shaverdian): Approved for CSC Committee Chair
5. Mon, 12 Oct 2020 23:24:13 GMT  
Nikrouz Faroughi (faroughi): Rollback to CSC Committee Chair for CSC Chair
6. Tue, 13 Oct 2020 05:00:11 GMT  
Anna Baynes (shaverdian): Approved for CSC Committee Chair
7. Tue, 13 Oct 2020 15:31:24 GMT  
Nikrouz Faroughi (faroughi): Approved for CSC Chair
8. Fri, 16 Oct 2020 17:10:22 GMT  
Gareth Figgess (figgess): Approved for ECS College Committee Chair
9. Fri, 16 Oct 2020 17:27:05 GMT  
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Thu, 01 Oct 2020 03:29:32 GMT

## Viewing: CSC 134 : Database Management Systems

Last edit: Mon, 12 Oct 2020 23:24:12 GMT

Changes proposed by: Ying Jin (102041392)

### Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Ying Jin	jiny@csus.edu	916-278-6250

### Catalog Title:

Database Management Systems

### Class Schedule Title:

Database Management Systems

### Academic Group: (College)

ECS - Engineering & Computer Science

### Academic Organization: (Department)

Computer Science

### Will this course be offered through the College of Continuing Education (CCE)?

No

**Catalog Year Effective:**

Spring 2021 (2021/2022 Catalog)

**Subject Area: (prefix)**

CSC - Computer Science

**Catalog Number: (course number)**

134

**Course ID: (For administrative use only.)**

168953

**Units:**

3

**In what term(s) will this course typically be offered?**

Fall, Spring

**Does this course require a room for its final exam?**

Yes, final exam requires a room

**Does this course replace an existing experimental course?**

No

**This course complies with the credit hour policy:**

Yes

**Justification for course proposal:**

1. The prerequisite change is to avoid students worried about failing their current course from occupying enrollment. Our current course waitlists are filled.
2. The Computer Science department reviewed our courses based on current teaching practice and professional organization recommendations. This update is required for Computer Science program external accreditation.

**Course Description: (Not to exceed 80 words and language should conform to catalog copy.)**

Entity-Relationship (ER) model; relational model; relational database design by ER-to-relational mapping; design of applications using database technology; SQL; schema definition, constraints, and queries; relational algebra; data normalization; access methods such as indexing and hash structures; introduction to transaction processing.

**Are one or more field trips required with this course?**

No

**Fee Course?**

No

**Is this course designated as Service Learning?**

No

**Does this course require safety training?**

No

**Does this course require personal protective equipment (PPE)?**

No

**Does this course have prerequisites?**

Yes

**Prerequisite:**

CSC 130, and not currently enrolled in CSC 134

**Prerequisites Enforced at Registration?**

Yes

**Does this course have corequisites?**

No

**Graded:**

Letter

**Approval required for enrollment?**

No Approval Required

**Course Component(s) and Classification(s):**

Discussion

**Discussion Classification**

CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)

**Discussion Units**

3

**Is this a paired course?**

No

**Is this course crosslisted?**

No

**Can this course be repeated for credit?**

No

**Can the course be taken for credit more than once during the same term?**

No

**Description of the Expected Learning Outcomes: Describe outcomes using the following format: 'Students will be able to: 1), 2), etc.'**

Students completing this course will be able to

- 1) Use Entity-Relationship (ER) model for conceptual design
- 2) Design a relational database by ER-to-relational mapping
- 3) Compose queries using relational algebra expressions
- 4) Use SQL for data definition and data manipulation
- 5) Analyze a relational database design using Normal Forms
- 6) Differentiate different types of index structures

**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.**

Learning Outcomes (1) to (6) are assessed with homework assignments and examinations.

**Is this course required in a degree program (major, minor, graduate degree, certificate?)**

Yes

**Has a corresponding Program Change been submitted to Workflow?**

No

**Identify the program(s) in which this course is required:****Programs:**

BS in Computer Science

**Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?**

No

**Will there be any departments affected by this proposed course?**

No

**I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.**

I/we agree

## University Learning Goals

### Undergraduate Learning Goals:

Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

## GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Please attach any additional files not requested above:

CSC134.pdf

### Reviewer Comments:

**Gareth Figgess (figgess)** (Mon, 12 Oct 2020 21:51:48 GMT): Rollback: As Requested

**Nikrouz Faroughi (faroughi)** (Mon, 12 Oct 2020 23:24:13 GMT): Rollback: update

Key: 1037