# 8/15/2020

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 2 September 2020

Term and Year of Implementation: Fall 2020

**Course Title:** Introduction to Database Design

**BRCC Course Rubric:** CSCI 1823

**Previous Course Rubric**:

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 3-0-3

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 45-0-45

**Louisiana Common Course Number:**

**CIP Code:** 15.1204

**Course Description:** Introduces fundamental database design principles for effective database design. Students will create tables, queries, reports, and forms using a database management system (DBMS), with a focus on data dictionaries, normalization, and data integrity. The course also provides an understanding of new developments and trends such as internet database environment and data warehousing.

**Prerequisites:**  CSCI 1923 with a grade of "C" or better

**Co-requisites:** CSCI 1933

**Suggested Enrollment Cap:** 30

**Learning Outcomes.** *Upon successful completion of this course, the students will be able to:*

1. Discuss database system architecture, components, and design principles.

2. Create relational databases.

3. Use query languages for data retrieval and database manipulation.

**Assessment Measures.** Assessment of all learning outcomes will be measured using the following methods:

1. Instructor prepared quizzes, tests, and final exam

2. Homework assignments

3. Group/individual project

**Information to be included on the Instructor’s Course Syllabi:**

* ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
* ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor’s and/or the department’s policy for make-up work. For example in a speech course, “Speeches not given on due date will receive no grade higher than a sixty” or “Make-up work will not be accepted after the last day of class”.
* ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
* ***General Policies*:** Instructors’ policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
* ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
* ***Safety Concerns:*** In some courses, this may be a major issue. For example, “No student will be allowed in the lab without safety glasses”. General statements such as, “Items that may be harmful to one’s self or others should not be brought to class”.
* ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

**Expanded Course Outline:**

I. Database systems overview

II. Database system evolution

III. Database planning and requirements analysis

IV. Dataflow in operations and data abstraction

V. Relational Databases

VI. Data model to schema conversion

VII. Database Design

VIII. Database Querying

IX. Designing Tables

X. Structured Query Language (SQL) Queries

XI. Usability, life-cycle, and evaluation of Database systems