Department Master Syllabus Camden County College Blackwood, New Jersey

Course Title: SQL Fundamentals I

Course Number: CIS - 235

Department/Program Affiliation: Computer Information Systems

Date of Review:

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided that no revision is necessary at this time.)

Date of Last Revision: November, 2018

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided a change requiring a revision is necessary at this time.)

N.B. A change to the course materials alone (textbooks and/or supplementary materials) may not constitute a revision. Any other change to the items listed below on this form is considered a revision and requires approval by the program faculty at a Program/Department Meeting and by the division at a Chairs and Coordinator Meeting.

Credits: 3

Contact Hours: Lecture 3 Lab 0 Other 0

Prerequisites: CIS-101 or CIS-105 or CIS-206

Co-requisites: None

Course Description: Relational databases often drive company-critical and web-enabled applications; therefore, database manipulation captures important data vital for a business ROI success. This course is hands-on data acquisitions working with relational databases, enabling the student to effectively analyze the business data. Popular databases use the Structure Query Language (SQL) to write and analyze queries and stored procedures. In this course, the student will learn to apply the basic SQL tools of use of the MS Sequel Server which will prepare the way for more advance topics, such as SQL Server Reporting Services (SSRS), Crystal Reports and other business intelligence tools.

Course Student Learning Outcomes: (Cognitive, Psychomotor, Affective Domains)

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

- 1. **Describe the many objects** of a database as assessed by tests and homework assignments.
- 2. **Manipulate data and build** reports using SQL as assessed by tests and homework assignments.
- 3. **Use the fundamental features** of SQL as assessed by tests, class participation, and homework assignments.
- 4. **Resolve database problems** with SQL code as assessed by tests, class participation, and homework assignments.

General Education Student Learning Outcomes (if applicable): NA

Course Outline:

Week 1Lesson 1	Introducing SQL
Week 2Lesson 2	Getting started with SQL
Week 3Lesson 3	Creating database tables (LBE Hands-on Project I)
Week 4Lesson 4	Inserting data into tables
Week 5Lesson 5	Retrieving data from tables
Week 6Lesson 6	Sorting retrieved data (LBE Hands-on Project II)
Week 7Lesson 7	Simple data filtering
Week 8	Midterm Final
Week 9Lesson 9	SQL data filtering
Week 10Lesson 10	Generating calculated fields (LBE Hands-on Project III)
Week 11Lesson 11	Manipulating data
Week 12Lesson 12	Grouping table data
Week 13Lesson 13	Building queries (LBE Hands-on Project IV)
Week 14Lesson 14	Joining database tables
Week 15	Final Exam

Course Activities:

Students will actively participate individually and in teams during the instructor led presentations. Classroom activities will include formal and informal lectures where new material and assigned problems will be explained. Students will have the opportunity to contribute to the discussion and to ask questions about the material. "Hands-on" work on the computer will be done during class to enforce the concepts covered as well as outside of regularly scheduled classroom hours.

Assessment of Student Learning Outcomes:

The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, class participation, projects, homework assignments, etc. (There must be some evidence that the learning outcomes have been achieved.)

Course Materials:

Textbook(s): Information on the text will be provided by the instructor on the first day of class.

Supplemental Materials: Information on the text will be provided by the instructor on the first day of class.