Rowan College
at GLOUCESTER COUNTY

BUSINESS STUDIES DIVISION
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CIS 264 — DATABASE APPLICATIONS DEVELOPMENT
SYLLABUS
LECTURE/LAB HOURS/CREDITS: 2/2/3

CATALOG DESCRIPTION
Prerequisite: CIS 151 and CIS 210
This course presents the features and concepts of dynamic websites which are driven by a relational database management system. Students will also acquire the skills and techniques needed to build and deploy dynamic Web applications that interact with a powerful database.

TEXTBOOK AND COURSE MATERIALS
It is the **responsibility of the student** to confirm with the bookstore and/or their instructor the textbook, handbook and other materials required for their specific course and section.

Please see current textbook prices at www.rcgc.bncollege.com

EVALUATION AND ASSESSMENT

Grading Distribution

Individual instructors may include the following assessment(s):	
• Exams • Quizzes • Projects / Assignments • Attendance and Participation	Grading to be determined by individual instructors

Grading Scale Example
The grading scale for each course and section will be determined by the instructor and distributed the first day of class.

ROWAN COLLEGE AT GLOUCESTER COUNTY CORE COMPETENCIES
(Based on the NJCC General Education Foundation - August 15, 2007; Revised 2011)

This comprehensive list reflects the *core* competencies that are essential for all RCGC graduates; however, each program varies regarding competencies required for a specific degree. Critical thinking is embedded in all courses, while teamwork and personal skills are embedded in many courses.

	RCGC Core Competencies
1	**Written and Oral Communication** Students will communicate effectively in both speech and writing.
2	**Quantitative Knowledge and Skills** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
3	**Scientific Knowledge and Reasoning** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
4	**Technological Competency** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
5	**Society and Human Behavior** Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
6	**Humanistic Perspective** Students will analyze works in the fields of art, history, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language
7	**Historical Perspective** Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
8	**Global and Cultural Awareness** Students will understand the importance of a global perspective and culturally diverse peoples.
9	**Ethical Reasoning and Action** Students will understand ethical issues and situations.
10	**Information Literacy** Students will address an information need by locating, evaluating, and effectively using information

CIS-264 CORE COMPETENCIES
This course focuses on two of RCGC's Core Competencies:

- Technological Competency
- Information Literacy

STUDENT LEARNING OUTCOMES: CIS 264 – DATABASE APPLICATIONS DEVELOPMENT

CIS-264 students will	RCGC's Core Competencies	Evaluation / Assessment
Demonstrate a competent foundation in technology and application software including databases, web pages, web server software and client-side scripting.	• Technological Competency • Information Literacy	- Homework/ lab assignments - Exams - Rubric for specific software applications
Demonstrate comprehension of concepts and techniques associated with computer information systems.	• Technological Competency • Information Literacy	- Homework/ lab assignments - Exams
Demonstrate the ability to use cutting edge open-source tools to prototype and build a data-driven web-based application. The project will involve building a web-based electronic medical record (EMR) system to track and update a patient's medical history.	• Technological Competency • Information Literacy	- Homework/ lab assignments - Semester Project
Students will learn the importance of teamwork as they split off into teams to work on the semester project.	• Technological Competency • Information Literacy	- Semester Project

CIS 264: Database Applications Development

TOPICAL OUTLINE

Overview of SQL Databases

Creating and Populating a SQL Database

Query Primer

Filtering

Querying Multiple Tables

Data Generation, Conversion and Manipulation

Grouping and Aggregates

Mastering MySQL

Dynamic Web Content

PHP

Expressions and Control Flow in PHP

Practical PHP

Accessing MySQL Using PHP

Form Handling

Exploring Javascript

Expressions and Control Flow in Javascript

Javascript and PHP Validation and Error Handling