Bergen Community College
Course Syllabus
Information Technology

Course Title:
INF-217 Database for Applications

Credits/Hours:
3 credits/2 hours lecture, 2 hours lab.

Prerequisite:
INF-101 Introduction to Information Technology CIS-158 Introduction to Computer Science or CIS-165 Fundamentals of Programming I or INF-220 Visual Basic Programming or INF-221 C/C++ Programming or INF-236 Java Programming or by permission of the Information Technology Coordinator

Course Description:
This course focuses on database design and implementation. Topics of discussion include database planning and development, normalization theory, creation of the conceptual model, conversion to the physical model, data entry and processing using SQL commands, and data integrity. Students will develop databases from specifications and demonstrate their utility by performing SQL data retrieval. Database Administration topics will be introduced.

Textbooks and Supplies:
See course outline

Student Learning Objectives	Assessment Measures
1. Match a core list of database terms with their definitions.	Written Exam
2. Design a normalized database and express the conceptual design using an accepted method for diagramming database models	Written Exam Lab Activity
3. Given a conceptual design, correctly implement the physical design of a relational database that includes constraints	Written Exam Lab Activity
4. Effectively use query statements (SQL), data definition language (DDL), data manipulation language (DML), transaction control language (TCL), and data control language (DCL) to manipulate a relational database	Written Exam Lab Activity
5. Analyze a business situation and develop a database application that correctly meets the business needs	Written Exam Lab Activity

College Competencies:	Student Learning Objective:
1. **Technological and Information Literacy** – Students will demonstrate computer literacy, and will be able to retrieve, organize, and analyze information using both technological and traditional means.	1 – 5
2. **Communication** – Students will read, write, speak, and listen effectively.	1 – 4
3. **APPLIED KNOWLEDGE—**Students will demonstrate an understanding of, and apply, bodies of knowledge within and across disciplines.	1 – 5

Course Content:
See course outline

Assessment:
An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

Exams and Quizzes:	60%
Projects and Lab Assignments:	40%

Quizzes:
There may be several quizzes, each worth 10 points, given at the beginning pre-selected classes. The quiz material will be based upon the prior lectures and labs, homework, and/or the reading assignments. At the end of the semester, the quiz points may be used to calculate bonus points. These "bonus" points may be used to increase the student's exam average. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz.

A student taking a quiz before the assigned quiz time will earn a zero (0) for the quiz.

Testing:
Students ***are required*** to take examinations on the day and time they are scheduled. If special circumstances require a test schedule adjustment, this must be ***worked out in advance*** with the instructor. If a student misses an exam (except for prearranged circumstances with the instructor) a zero grade will be assigned. A student taking an exam before the assigned exam time will earn a zero (0) for the exam.

The instructor can be reached by ***telephone*** (see course outline for appropriate phone number)**, *e-mail, or a written note*** can be left in the Divisional Office (during the day) A-306C or in the Evening Office L-113. If there are extreme circumstances (documentation may be required) that prevent a student from taking a test or an exam according to the published schedule, the student should use one of the above options to contact the instructor immediately before the next class. An arrangement for a special testing schedule is solely at the ***discretion of the instructor***. A student who waits for the next class session to speak with the instructor will not be accommodated with a special test schedule.

It is the student's responsibility to finish an examination correctly and completely.

The use of electronic devices during exams is prohibited. Any student using an electronic device during an exam (unless directed to do so by the instructor) will receive a 0 for the exam.

Laboratory Work / Projects:

Laboratory assignments are hands-on productions that show the instructor that the student can competently use specified software and/or apply specific concepts. It is important that the student attend all lab sessions.

It is anticipated that students will spend at least 4 hours per week perfecting their skills and completing their assignments. Project assignments are required for grading. They must be submitted on the assignment due date, and ***cannot be handed in late***. Acceptance of late project assignments is solely at the ***discretion of the instructor***.

Lab assignments are instructional and need not be submitted unless requested by instructor.

Homework:
In addition to any homework assignment given during class, it is a **standing assignment** that the student read each Lesson of the online content prior to its discussion. Following the class discussion, the student should reread the online material and work with the exercises throughout the online site. It is anticipated that students will spend at least 4 hours per week reading the online material and working with the exercises and supplemental resources.

Policies:

- Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- The student must adhere to all college polices. Due to the nature of this course, it is recommended that the student review the policy titled *"Acceptable Information Technology Use at Bergen Community College"*.
- The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class. (Cell phones are to be off during class.)
- The use of audio CD or tape players, radios, and college computers to play music during class is prohibited.
- Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).
- The subject line of all real world email correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester, a student's attendance, class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled starting time, students should generate an attendance list. One volunteer member needs to deliver the list, containing the course title, date, and instructor's name, to the Evening Office (L-113) or to the Divisional Office (during the day) A-306C.

Additional policy and assessment information may be distributed by individual instructors.