

Introduction to Databases

CIS-194 1

Spring Term 2024-2025 School Year Section 1 3.00 Credits 01/13/2025 to 05/09/2025

Modified 01/13/2025

Course Description

This course teaches students the fundamentals of proper relational database design. Exposure to data modeling is provided by using many real life examples. Activities designed to develop "professional skills" include teamwork and team building, presentation, and project management. Hands-on experience working with relational databases is obtained by using the Structured Query Language (SQL). Creation of a normalized database utilizes Entity Relationship Diagrams (ERD's).

Outcomes

Course Outcomes

Upon successful completion of this course, the student shall be able to

- Define and utilize database terminology effectively.
- Create queries using SQL.
- Diagram users' requirements using modeling techniques.
- Transform data models into normalized relations.
- Describe database access standards.

Additional Outcomes

Science and Technology

- Develop software applications to solve a business problem.
- Demonstrate proficiency in the design and use of databases.

Problem Solving/Critical Thinking

- Appraise the strengths and weaknesses of one's completed work.
- Analyze a client's software requirements in order to develop possible solutions.

Professionalism

- Utilize professional resources (i.e. professional organizations, media and IT websites).
- Use effective time management skills.

Communication

- Research and present an IT topic using appropriate terminology.
- Write programs with clarity, efficiency, and accuracy.

Course Materials

Oracle online curriculum is used in this course which also serves as the textbook.

Deliverables

Assignments

Assignments are to be turned in via MyTech while quizzes and tests are to be completed online in the Oracle online curriculum.

There will also be two projects to present in the class.

Evaluation Procedures and Grading

Criteria

Exams (40% of grade)

Exams are assigned from the Oracle web site. There are 6 exams (2 1-part and 2 2-part). The lowest test score will be dropped from the final grade.

Quizzes (20% of grade)

Labs/Database Projects (40% of grade)

- Being absent from class is not an excuse for turning in an assignment late.
- Student may receive partial credit for partial solutions.

Breakdown

Grading Scale:

A: 89.5 -100%	B: 79.5 - 89.5%	C: 69.5 - 79.5%	D: 59.5 - 69.5%	F = 59% and Below
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