BT 2500

Division: Business and Technology
Department: Business Technology
Course: BT 2500
Title: Database for Business
Catalog Description:

Students will learn how to organize and manage large amounts of data using a relational database. The course will focus on creating and querying tables, creating custom forms and reports, integrating the database with other software applications, automating tasks with macros, and securing a database.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 3; Lecture: 3; Lab: 0
Clock/Hour Requirements: 0
Offered for Non-Credit: Yes
Prerequisites: CIS 1010 or equivalent

Justification:

Organized data is a valuable asset in business. This course will prepare students for entry-level employment and accommodate transfer to universities. It is modeled after similar courses at UVSC (ISYS 2370) and SUU (ISA 2100). The Business Technology Advisory Committee believes that students need database proficiency to meet the expectations of employers.

Student Learning Outcomes:

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

- Understand the theory of relational databases--primary keys, foreign keys, referential integrity, and normalization.
- View and work with a table
- Create, modify, and update a table
- Query a database and retrieve information to help make business decisions
- Use AutoFormat and form and report wizards
- Create advanced queries and custom forms
- Integrate a database with the web and other software applications
- Use subreports, group controls, and aggregate functions
- Export database information to HTML, Excel, and Word
- Create PivotCharts and PivotTables

- Create the following queries: crosstab, find duplicates, find unmatched, top values, make-table, append, delete, and update
- Design a switchboard and dialog box form, use single step macros, create macro groups, and use SQL statements to fill list boxes
- Create, compile, and test function procedures, sub procedures, and event procedures
- Encrypt and decrypt a database, set and unset a database password, and use the user-level security wizard to assign permissions
- Appreciate the value of data for businesses and understand how that data becomes useful information used in business decision making

Content:

Course objectives will be accomplished by

- Introducing Relational Databases
- Creating and Maintaining a Database
- Querying a Database
- Creating Forms and Reports
- Enhancing a Table's Design
- Creating Custom Reports
- Integrating Access with the Web and other Software Programs
- Using Query Wizards, Action Queries, and Defining Table Relationships
- Automating Tasks with Macros
- Using and Writing Visual Basic

General Education Outcomes:

4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Students will use database tools to retrieve (query) specific information by defining criteria with comparison operators (<, >, =, <=, >=, < >) and logical operators (and, or) that can be used to sort, evaluate, interpret, and deliver business information.

Applied Education Outcomes:

2) Students will become aware of industry specific certification and develop skills sufficient to acquire the same.

Students will practice Microsoft Access software tasks similar to what is presented in the Microsoft Application Specialist Certification exam or equivalent.

Key Performance Indicators:

Assignments and projects will be evaluated to determine expert-level proficiency and knowledge of the database software: 40 percent of the final grade

Objective exams will test the understanding of theory and terminology used in databases, and production exams will give students an opportunity to demonstrate their skill using database software: 50 percent of the final grade

Class participation and attendance: 10 percent of the final grade

Percentages are approximate.

Representative Text and/or Supplies:

Adamski and Finnegan, *Microsoft Access New Perspectives Comprehensive*, current edition or equivalent, Course Technology.

SAM, SNAP, or other equivalent online assessment and training software, current edition or equivalent.

Optimum Class Size: 18
Maximum Class Size: 20

Signatures:

I hereby submit this course syllabus:

Lisa Anderson, MS, Associate Professor

I hereby find this course consistent with the goals and resources of the Business Technology Department:

Lisa Anderson, MS, Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Business and Technology Division:

Doug Dyreng, MS, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)