SECTION I

SUBJECT AREA AND COURSE NUMBER

OFSY 510

COURSE TITLE

DATABASE SYSTEMS:BEGINNING

TYPE COURSE

NON-FEE   VOCATIONAL

CATALOG COURSE DESCRIPTION

This course is an introduction to database management concepts and techniques including data entry, editing, correlating database information, generating customized reports and data queries, and designing database structures (tables, queries, forms, reports). (FT)

LECTURE/LABORATORY HOURS

      54

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

Eighth grade reading level, ability to communicate effectively in the English language.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
    SDCE students demonstrate interpersonal skills by leaning and working cooperatively in a diverse environment.
2. Effective Communication
    SDCE students demonstrate effective communication skills.
3. Critical Thinking
    SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
    SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self advocacy skills to cope with changing situations in their lives.

COURSE GOALS

Introduce database functions, terminology, and how information is organized. Develop problem solving techniques involving use of a database in a rapidly changing technology. Enhance reading, writing, math and communication skills, enabling students to process technical information, and interact with employers and customers. Present different types of databases, their components and use. Present/review computer hardware components, printers and other peripherals including proper and safe use of equipment and software. Demonstrate and provide hands-on database use including creating, entering data, modifying, retrieving, querying, organizing (sorting), updating, deleting, generating, managing and printing reports and forms.

COURSE OBJECTIVES

After successfully completing this course, each student will be able to:

1. Describe different types of databases and their uses.
2. Explain database and basic computer terminology as used with databases.
3. Create and modify a database file structure or table.
4. Add, delete, insert, modify and update database records.
5. Display and print database records.
6. Search, retrieve, manage and display information.
7. Organize and display information by sorting and indexing records.
8. Create and customize a form and query.
9. Perform simple calculations.
10. Use comparison operators, wildcards, and other operators to set query criteria.
11. Use aggregate functions such as average, count, sum, maximum, and minimum.
12. Create, modify, enhance, generate, and print reports.
13. Share files using the "Cloud" and setup appropriate level of access.

SECTION II

COURSE CONTENT AND SCOPE

1. All Topics of the Course Contain the Following:
    1.1. System descriptions
    1.2. Theory of operation
    1.3. Data organization
    1.4. Trouble-shooting procedures
    1.5. Related terminology
2. Overview of Database Concepts
    2.1. Database terminology such as character, field, record, table, windows and files
    2.2. Use of a primary and foreign key field for retrieving and relating data
    2.3. Database management system (DBMS)

COURSE CONTENT AND SCOPE (CONTINUED)

 2.4. Different types of databases, such as hierarchical and relational
 2.5. Practical use of databases
 2.6. Ethical areas of access, privacy, responsibility to update with correct information
3. The Database Application Screen
 3.1. Navigate the screen
 3.2. Menus
   3.2.1. Toolbar
   3.2.2. Use of function keys
4. The Database Table Structure
 4.1. Design and create a new table structure
 4.2. Identify field name, type, properties and size
 4.3. Modify, delete, insert, import and format a table or a structure
 4.4. Modify field names
 4.5. Add and delete fields
5. The Database Record or Table
 5.1. Add, edit, insert, delete and update data or records in a table
 5.2. Sort or index data or records
6. Create a Query
 6.1. Search, retrieve, locate and display information
 6.2. Set simple criteria for searching records
 6.3. Perform simple calculations
 6.4. Use comparison operators, wildcards, and other operators to set a query criteria
   6.4.1. Discuss the order of operation
7. Create Reports
 7.1. Perform functions such as average, count, totals
 7.2. Display and print tables or queries
 7.3. Modify, enhance, generate, and print reports
8. Create a Form
 8.1. Navigate a form to display or input data
9. Share Files Using the "Cloud" and Setup Appropriate Level of Access

APPROPRIATE READINGS

Appropriate readings may include, but are not limited to, textbooks, supplemental reading assignments, internet research or magazines, manuals, on-line help and tutorials.

WRITING ASSIGNMENTS

Writing assignments may include, but are not limited to, providing written answers to assigned questions related to databases, designing and describing a database for practical use, outlining procedures, taking notes, maintaining a portfolio of class assignments/projects, being a recorder for a group project and/or preparing an oral presentation from related information.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, reading and researching material related to databases from a variety of resources, preparing written assignments, completing assigned projects alone or with a group, and interviewing a database developer or someone knowledgeable about databases in business.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to: written and oral analysis, reading assignments, class discussion, analyzing problems and determining if a database can be used to solve them.

EVALUATION

Evaluation methods may include, but are not limited to: performance in a variety of activities and assignments, such as:

1. Written and practical tests.
2. Completion of assigned exercises.
3. Attendance and punctuality.
4. Completion of performance competencies.
5. Participation in class and team work.
6. Portfolio of class projects.

Upon successful completion of each individual course a Certificate of Course Completion will be issued. Upon successful completion of all courses included in the program a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction will include, but are not limited to, lecture, lab, demonstration, individualized study, use of audio-visual, tutorials, group and team work. Other unique instructional strategies, such as field trips, computer accessing, job shadowing, volunteering and guided student job assignments, may be utilized. This course or a section of this course may be taught through distance education.

TEXTS AND SUPPLIES

Texts shall be current and relevant to the software such as:

Learning to Use Windows Applications, Access 2.0, Shelly, Cashman, Southwestern
     Publishing Co., latest edition
Microsoft Office Access: Introductory Concepts and Techniques Adobe eBook, Gary B. Shelly,
     Thomas J. Cashman, Misty E. Vermaat, latest edition
Microsoft Office Access, New Perspectives, Comprehensive Course Technology, latest edition

TEXTS AND SUPPLIES (CONTINUED)

Supplies:

Storage media.

PREPARED BY   Office Systems Professors   DATE   April 21, 1987

REVISED BY   Marcy Schroeder   DATE   September 15, 1989

REVISED BY   Joan Wells   DATE   August 23, 1995

REVISED BY   Sharian Lott   DATE   February 22, 2007

REVISED BY   Instructional Services/SLO's Added   DATE   June 1, 2011

REVISED BY   Maria Reyes-Niemeyer   DATE   November, 2012

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog