

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

OFSY 511

COURSE TITLE

DATABASE SYSTEMS: INTERMEDIATE

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course is designed to further develop skills in creating a relational database management system. Emphasis is on advanced features such as operation, linking of database structures (tables, queries, forms, reports), use of database command language and program file creation. (FT)

LECTURE/LABORATORY HOURS

54

ADVISORIES

Successful completion of OFSY 510, Database Systems:Beginning or equivalent.

RECOMMENDED SKILL LEVEL

NONE

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.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

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

Develop problem solving techniques involving use of a database in a rapidly changing technology. Introduce career choices relevant to database management and development. Enhance reading, writing, math and communication skills, enabling students to process technical information, and interact with employers and customers. Develop a basic understanding of the concepts behind each task, and comprehend how different applications are often used interactively to complete a variety of tasks. Demonstrate and provide hands-on data base use including performing complex queries using single and combined conditions, customizing an input screen, customizing output to either a screen or to a printer; creating mailing lists, generating labels; integrating and exporting other software files, merging multiple files, creating and establishing table relationships; enhancing reports with special print functions; using a database command language and designing and developing, running, testing, debugging and printing a simple command file. Provide opportunities for students to work in teams to produce unified projects. Encourage problem solving and critical thinking individually and with partners or groups to produce useful work. Demonstrate and provide hands-on experience integrating different applications by creating business projects with materials from several software applications.

COURSE OBJECTIVES

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

1. Create and use complex queries using multiple criteria.
2. Customize an input screen.
3. Customize output to either a screen or to a printer.
4. Import and export software files.
5. Define and establish table relationships.
6. Enhance reports with special customization functions.
7. Demonstrate use of a database command language.
8. Create, test, run, print, and debug a simple command file using a database command language.
9. Share files using the "Cloud" and setup appropriate level of access.

SECTION II

COURSE CONTENT AND SCOPE

All topics of the course contain the following:

COURSE CONTENT AND SCOPE (CONTINUED)

1. System Descriptions
 2. Theory of Operation
 3. Data Organization
 4. Trouble-Shooting Procedures
 5. File Sharing
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1. Overview
 - 1.1. Review database terminology
 - 1.1.1. Practical use of databases in modern technology
 - 1.1.2. Commercial services (proprietary databases): teleshopping, home banking, investing, travel reservations
 - 1.1.3. Uploading and downloading files
 - 1.2. Shared database (company, common user) internal and external to an organization
 - 1.3. Use of databases in industry: business directories, demographic data, inventories, statistical and financial information, and web
 - 1.4. Career choices relevant to the use or development of databases
 - 1.5. Security, ethics, access, and privacy issues
 2. Using a Database
 - 2.1. Develop complex queries and combined search conditions (use of and/or)
 - 2.2. Using database commands
 - 2.3. Organize a database using multiple indexes and filters
 - 2.4. Entering database commands from the code window
 - 2.5. Create forms and subforms to customize an input screen
 - 2.6. Create reports to customize output to either a screen or to a printer
 - 2.7. Special print functions
 3. Combining Database Information
 - 3.1. Relate multiple tables and queries using one-to-many, many-to-many
 - 3.2. Create mailing lists, generate labels
 - 3.3. Import and export software files
 4. Database Programming
 - 4.1. Relational database
 - 4.2. Database command language
 - 4.3. Simple procedure command files and macros
 5. Share files using the "Cloud" and setup appropriated level of access

APPROPRIATE READINGS

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

WRITING ASSIGNMENTS

Writing assignments may include, but are not limited to, providing written answers to assigned questions related to database design, outlining procedures, taking notes, maintaining a portfolio of class assignments/projects, being a recorder for a group project, preparing an oral presentation from related information, writing a program using a program language, creating a document by integrating various types of software applications, combining use of mailing lists

WRITING ASSIGNMENTS (CONTINUED)

and labels with a written project, and create a form by merging multiple files to produce a document.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, reading, researching material related to databases from a variety of resources, preparing written assignments, job shadowing, volunteering, using or maintaining a database, 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 and evaluation of readings and/or classroom material, class discussions of readings, lectures, ideas, ethics, observations, practical experience, designing and programming a database to analyze a problem, understanding the capabilities and limitations of various database software for advanced use, evaluating a complex set of criteria, plan and integrate several software tools to solve a problem, and examining the ethics issues of privacy, access, security, and computer crime.

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 may 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, 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 must be current and relevant to the course such as:

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, Access Comprehensive Course Technology,
Adamski, latest edition

Supplies:

Storage media.

PREPARED BY	<u>Office Systems Professors</u>	DATE	<u>April 21, 1987</u>
REVISED BY	<u>Marcy Schroeder</u>	DATE	<u>September 15, 1989</u>
REVISED BY	<u>Joan Wells</u>	DATE	<u>August 23, 1995</u>
REVISED BY	<u>Sharian Lott</u>	DATE	<u>February 22, 2007</u>
REVISED BY	<u>Instructional Services/SLO's Added</u>	DATE	<u>June 1, 2011</u>
REVISED BY	<u>Maria Reyes-Niemeyer</u>	DATE	<u>November, 2012</u>

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