San Bernardino Valley College
Curriculum Approved: November 8, 2004

I.   **CATALOG DESCRIPTION:**
        A.   Department Information:
                Division: Business and Information Technology
                Department: Computer Information Technology
                Course ID: CIT 116
                Course Title: Database Management: Access
                Units: 3
                Lecture: 3 hours
                Laboratory: None
                Prerequisite: None
                Departmental Advisory recommendation: CIT100 or CIT 101

        B.   Catalog and Schedule Description:
                Development and maintenance of a database. Provides a working knowledge of
                designing a database and setting field properties, storing, retrieving, printing, and
                indexing records; creating informational and technical queries; developing customized
                forms and reports; establishing different types of relationships; integrating Access with
                the Web; and creating a database Switchboard. Emphasis on developing a practical
                ability to use a database in a Windows environment with full graphical user interface
                functionality. (Formerly MIS/OIS 179)

II.   **NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT:** One.

III.   **EXPECTED OUTCOMES FOR STUDENTS:**
        Upon successful completion of the course, the student should be able to:
        A.   plan and set up a database by the selective process of defining the actual structure,
                naming the fields, specifying the field types, determining the width and decimal position
                of each field, and determining other field properties.
        B.   identify Access commands to maintain a database, to sort and locate specific records in
                a database.
        C.   create advanced informational and technical queries that use multiple conditions.
        D.   create custom forms, subforms, and multiple forms.
        E.   design different types of reports by analyzing available information to be generated into
                pertinent printouts.
        F.   create different type of relationships among database tables.
        G.   manipulate field properties to keep the integrity of the data in the table.
        H.   evaluate the accuracy of the existing database by implementing commonly used
                database commands.
        I.   distinguishing the database interface and creating a Database Switchboard.
        J.   integrating Access with the Web and with Excel.

IV.   **CONTENT:**
        A.   Creating a Database
                1.   Learning the guidelines for designing databases and setting field
                        properties.
                2.   Learning the concept of a primary key.
                3.   Adding records to a table.
                4.   Modifying the structure of a table and changing field properties.
                5.   Deleting, updating, finding, sorting, and filtering records.
                6.   Copying records and importing tables from another Access database.
                7.   Compacting and repairing a database.

8. Manipulating fields' properties.
9. Creating input masks.
   B. Querying a Database
1. Creating, running and closing a query.
2. Using wildcards.
3. Using compound operators to make joins.
4. Adding calculated fields to a query.
5. Using the totals functions to perform record group calculations.
6. Creating a parameter query.
7. Creating technical queries.
8. Creating crosstab queries
   C. Maintaining a Database
1. Adding, editing, and deleting records.
2. Defining specific ranges, default values, legal values and format.
   D. Presenting data in a Form
1. Creating a main form and a subform.
2. Customizing the look of forms.
3. Adding calculated fields to a form.
4. Adding command buttons to a form.
5. Creating access Web page.
   E. Presenting data in a Report
1. Creating and customizing reports.
2. Using the group by functions and the summary options.
   F. Creating Relationships among the database tables
1. Define one-to-one relationships.
2. Define one-to-many relationships.
3. Define many-to-many relationships.
   G. Create a Switchboard
1. Designing a switchboard using a switchboard manager.
2. Using the link tables command.

V. METHODS OF INSTRUCTION:
   A. Lecture
   B. Interactive lecture using the computer projector which allows the students to practice the commands as they learn them
   C. Directed discussion and discovery
   D. Demonstrations
   E. Practical exercises
   F. Data-show

VI. TYPICAL ASSIGNMENTS:
   A. Reading, writing, problem solving or performance
1. Make a copy of the database file and name the copy. Then open the table. Change to datasheet view. For each book, enter the author's last name, author's first name, book title, type of book, and publication date. Use the information provided in your textbook.
   B. Examination
1. Sample Examination Question
     a. Create a Database named Customers using the supplied fields' names.
     b. Define the fields' types and fields properties for this table.
     c. Create a query that uses the total functions to show the average prices of the homes in the city of Rialto or San Bernardino.
     d. Create a main form and a subform for Customers database according to the following specified instructions.

VII. **EVALUATION:**
   A.   Methods of Evaluation
      1.   Student are evaluated on their ability to apply course concepts to what they read
      2.   Four hands-on tests on the computer
      3.   Term project
      4.   Completion of all the required assignments for the class
   B.   Frequency of Evaluation
      1.   Minimum of five quizzes
      2.   Weekly practice exercises
      3.   Four examinations
      4.   Final exam

VIII. **TYPICAL TEXTS:**
Toliver, Pamela R. Access 2002, Upper Saddle River, NJ: Prentice Hall, 2002
Grauer, Robert T. and Barber, Maryann. Exploring Microsoft Access, Upper Saddle River, NJ:
Prentice Hall, 2002.
Micromax International A.S. Professor Micromax Access , St. Paul, MN: EMC Paradigm, 2002.
Shelly, Gary B. and Cahsman, Thomas J. and Pratt, Philip J. and Last, Mary Z. Microsoft Access
2002, Boston, MA: Thomson Course Technology, 2002.

VIII. **OTHER SUPPLIES REQUIRED OF STUDENTS:**
Zip Disk and three-ring binder