COUNTY COLLEGE OF MORRIS
Course Information Outline

Course Title ___Database Programming (MS Access)___ **PREFIX & NUMBER** CMP205

Lecture Hours _3_ **Laboratory Hours** _1_ **Credit Hours** _3_ **Course Fee** _$40yes_

Department Chairperson Approval *Nancy E Bmowski* **Date**_____

Division Dean Approval _____ **Date** _1.29.15_

1. **General Education Course Categories:**
   □ Communications □ Diversity □ Ethics □ History □ Humanities
   □ Mathematics □ Science □ Social Science □☒ Technology/Information Literacy

2. **Catalog Course Description**
   This course is designed to develop skill in the use of a leading DBMS (Database Management System). Topics include the design and maintenance of relational databases and their objects (tables, queries, forms, and reports). Also covered is the use of macros to implement procedures. The final portion of the course covers automation techniques by introducing the VBA (Visual Basic for Applications) programming language and the use of this code to create a user-friendly interface.

3. **Prerequisite(s)**
   MAT011 None.

4. **Co-requisite(s)**
   None

5. **Textbooks**
   New Perspectives on Microsoft Office Access 2010, Comprehensive, Adamski & Finnegan, Course Technology or current edition.

6. **Supplementary Books and/or Materials**
   File Backup Media

7. **Specialized equipment, supplies, facilities, for classes limited by enrollment or restricted by accreditation and/or equipment limitations.** (Information will be used to determine differential funding category.)

8. **Course Content (List of Topics)**
   - Creating a Database
   - Defining Table Relationships
   - Maintaining a Database
   - Querying a Database – Simple to Advanced
   - Creating Standard and Custom Forms
   - Creating Standard and Custom Reports
   - Writing and Using Visual Basic for Applications Code

9. **Statement of Course LEARNING OUTCOMES**
   Upon completion of this course, students will:
   - Build an Access database (having multiple related tables) using efficient design techniques with appropriate data types.

- Create Access forms ranging in complexity from simple to complex including subforms and bound controls.
- Create Access reports ranging from simple to custom design with headers, footers, and custom controls.
- Query an Access database using standard query types e.g. Crosstab Query, Find Duplicates Query, etc.
- Construct simple to complex custom queries containing calculated fields, aggregate functions, global characters, and advanced functions.
- Create a user interface using the Access Switchboard feature.
- Create, modify, and implement Visual Basic for Applications (VBA) macros to automate database activities.

10. **Statement of Relation to Curriculum(s)**
    - Elective in ~~3500~~ 2500 Computer Science Option
    - Required in 3501 Management Information Systems Option
    - Required in 3502 Technical Support Option
    - Required in 3503 Administrative Support Option
    - Elective in 3510 Technical Studies Information Technology

11. **Format for offering the course (check all that apply)**

    ☒Traditional   ☒On-Line   X———Hybrid

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