

**Common Course Outline**  
**CINS 134**  
**Comprehensive Databases**  
**3 Semester Hours**

**The Community College of Baltimore County**

**Description**

**Comprehensive Databases**

Provides an introduction to databases and database management systems (DBMS) and an opportunity to design, create, and modify a database using MS Access; discusses retrieval of information by creating queries, reports, and forms.

3 credits: 3 lecture hours (this course is delivered in a combination lecture and hands-on format).

Prerequisite: CINS 101 or consent of the Program Director or Academic Dean

**Overall Course Objectives**

Upon completion of this course the student should be able to:

1. Distinguish between a database and a traditional file
2. Identify the major components of a DBMS
3. Design a database
4. Create keys
5. Implement integrity constraints
6. Create a database
7. Maintain a database
8. Query a database
9. Create forms
10. Create reports
11. Create macros
12. Create modules

**Major Topics**

1. Comparison of file processing and database processing
2. Components of a Database Management System (DBMS)
3. Functions of a DBMS
4. Relational Database Structures/Terminology
5. Keys
6. Database Design
7. Relationships
8. Integrity Constraints
9. Database Creation
10. Database Modification
11. Queries
12. Forms

13. Reports
14. Macros
15. Modules/VBA
16. Compacting
17. Replication/Synchronization
18. Importing Data
19. Exporting Data
20. Integrating with other programs
21. Saving database objects in HTML format
22. Importing data from an HTML file into a database object

### **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

- At least four projects of increasing difficulty. The projects should contain multiple exercises.
- At least four written tests
- A comprehensive final exam

Writing: The individual faculty member will determine specific writing assignments.

### **Other Course Information**

This course is the first course in a two-course sequence.

This course is taught in a computerized environment.