

**Atlantic Cape Community College**  
**Information Systems and Aviation Studies Department**

**CISM164 MICROCOMPUTER APPLICATIONS USING RELATIONAL DATABASES**

**COURSE DESCRIPTION**

Advanced concepts in relational database development. Emphasis on the structured techniques for program design, development, testing and documentation to build business applications. Includes the creation of data entry screens for interactive environments with emphasis on report generation for business applications.

*(3 Credits            Prerequisite: CISM125 Introduction to Computers)*

**TEXTBOOK:**

Please visit Atlantic Cape's bookstore Web site for current book information

**COURSE GOALS AND OBJECTIVES**

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

**1. Answer the questions:**

- a. "What is a database?"
- b. "What are the types of databases?"
- c. "What type of database is Access?"
- d. "What is a field?"
- e. "What is a record?"
- f. "What is a table?"
- g. "What is a query?"
- h. "What is a form?"
- i. "What is a report?"

**2. Give examples of the major objects in an Access database**

**3. Create relational database tables and manipulate them to achieve desired outputs**

- a. Enter records into a table
- b. Navigate a datasheet
- c. Create relationships between tables

#### **4. Create queries**

- a. Sort records in a query
- b. Modify a query
- c. Create calculated fields in a query
- d. Use aggregate functions in a query

#### **5. Create forms**

- a. Use a wizard to create a form
- b. Modify a form's design
- c. Navigate a form
- d. Create a form with subform

#### **6. Create reports using wizards**

- a. Modify a report's design

#### **7. Create advanced queries**

- a. Use a pattern match
- b. Use a list-of-values match
- c. Use the Not logical operator
- d. Create a parameter query
- e. Create a crosstab query

#### **8. Use input masks and validation rule**

#### **9. Create customized forms using form tools**

#### **10. Create customized reports**

- a. Add lines, dates, and page numbers
- b. Sort and group data on a report

#### **11. Create mailing labels**

#### **12. Effectively integrate all objects into a database**

#### **13. Create menus using macros to make Access objects work together more intelligently**

## **COURSE EVALUATION**

Grade Scale:           495 to 550 = A  
                              440 to 494 = B  
                              385 to 439 = C  
                              330 to 384 = D  
                              < 330     = F

## **LEARNING ACTIVITIES**

4 Tests	225 points
Homework Assignments	235 points
Attendance	30 points
Project	60 points
Total Possible Points	550 points