

Science, Allied Health, Health, & Engineering Department

Course: CSA 140 Database Applications

Instructor: Jill Flanigan

CRN: 3172 Semester: Fall 2018

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Location: Fully Online Day/Time: Assignments due weekly.

Instructor

Name: Jill Flanigan Phone: 860-343-5791 E-mail: jflanigan@mxcc.edu

Schedule an appointment: https://jillflanigan.youcanbook.me

Office Hours [Wheaton Hall, Room 313]: Tuesday 9am - 12pm and 2pm -3 pm and Wednesday 10am - 12pm

#### Course Description (must include prerequisites):

Gen Ed Competencies: Continuing Learning/Information Literacy, Critical Analysis & Logical Thinking. This course will provide an introduction to database software. Students will learn to create and manipulate databases using leading database packages currently popular in business and industry. Students will get an overview of the range of available database management systems and an understanding of fundamental theory. Hands-on work will be emphasized. Prerequisite: Eligible for either ENG\* 101E or ENG\*101. (Updated October 2014)

## **Required Texts:**

- Shellman/Vodnik, New Perspectives on Microsoft Office 365 & Access 2016: Comprehensive, 2017.
- MindTap Computing, 1 term (6 months) Instant Access for Shellman/Vodnik's New Perspectives Microsoft Office 365 & Access 2016: Comprehensive

## Major Assignments and their Value/Weight:

Assignments (SAM Training)	25%
Tests (SAM Exam)	25%
Project (Module Projects)	25%
Summary Project (Capstone)	25%

# **Grading Scale:**

A 100-93	B 86-83	C 76-73	D	66-63
A- 92-90	B- 82-80	C- 72-70	D-	62-60
B+ 89-87	C+ 79-77	D+ 69-67	F	59-0

### Additional Syllabus Information and College Policies:

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, non-discrimination, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather/emergency closings, and more, please go to the following website: <a href="https://www.mxcc.edu/catalog/syllabus-policies/">www.mxcc.edu/catalog/syllabus-policies/</a>

## **General Objective of the Course**

CSA 140 studies the use and application of the database software, Microsoft Access. The student will learn:

- To navigate Windows Explorer.
- To define the terms used in the database environment.
- To start and exit Access.
- To open an existing database.
- To identify the components of the Access and Database windows.
- To create, run, and print a query.
- To use the Access help system.

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- To compact a database.
- To create and save a table.
- To add records to a table.
- To modify the structure of a table.
- To copy records from another Access database.
- To delete and change records.
- To use the Query window in the Design view.
- To define a relationship between two tables.
- To sort data in a query.
- To enter criteria in a query.
- To perform calculations in a query.
- To create a form using the Form Wizard.
- To change a form's AutoFormat.
- To navigate a form and find data using a form.
- To preview and print selected records using a form.
- To maintain data using a form.
- To create a form with a main form and a subform.
- To create a report using Report Wizard.
- To create more advanced queries and custom forms.
- To customize reports and integrating Access with other programs.
- To view and understand the SQL statements Access creates when you design a query.

### **Designated TAP Competencies:**

#### Critical Analysis and Logical Thinking

- 1. Identifying arguments: Identify issues, evidence and reasoning process; distinguish facts from opinion; recognize various types of arguments.
- 2. Formulating arguments: Formulates good arguments, including significant focus on inductive reasoning.
- 3. Analysis: Break subject matter into components and identify their interrelations to ascertain the defining features of the work and their contributions to the whole.
- 4. Evaluation: Identify assumptions, assessing the quality and reliability of sources of evidence, and demonstrating knowledge of the criteria for evaluating the success of each kind of inference.
- 5. Synthesis: Draw together disparate claims into a coherent whole in order to arrive at well-reasoned and well-supported inferences that can be justified as a conclusion.

## Continuing Learning/Information Literacy

- 1. Demonstrate competency in using current, relevant technologies to solve problems, complete projects, and make informed decisions.
- 2. Access, navigate, identify and evaluate information that is appropriate for their need(s) and audience(s).
- 3. Synthesize information to broaden knowledge and experiences and produce both independent and collaborative work.
- 4. Evaluate the economic, legal, ethical, and social issues surrounding the access and use of information and relevant technologies.

### Methods of Instruction:

Learning will be achieved through use of textbook readings, lecture slides, online videos, library resources, and web links. Resources will be posted to the Blackboard Course space. Students may submit questions about course materials in class, through online discussion boards, or may visit me during office hours. It is important to read all the assigned material and view any video resources posted to the Blackboard Course.

## **Attention Mobile Users:**

Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide a convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, completing assignments or submitting substantive discussion posts.

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# **Communication Plan:**

These are my expectations for electronic communication:

- I will remove posts that I determine to be inappropriate or unprofessional.
- Post all questions regarding course readings, assignments, or assessments to the Discussion Board.
- Please use email (course messages) \*ONLY\* when the subject is of a personal and confidential matter. If the question you ask is of a nature that even one other person in the course could benefit from the answer, post the question in the appropriate discussion board forum.
- Use APA Style for written submissions in this course www.apastyle.org.
- The writing style of discussion boards should be formal and business-appropriate, including citation of sources.

#### **Technology and Social Media:**

- Students should not mix personal and academic/professional contacts and accounts when using social media.
   Students should create social media accounts specifically for professional/academic use to separate their personal online persona from their professional/academic work.
- The college assigns and e-mail account to all students. I will communicate with students through course e-mail or through e-mail directly to the student's Middlesex Community College e-mail address.
- I will not accept requests to connect with students from my personal social media accounts. I have a LinkedIn
  account for professional use and I will accept requests to connect from students who have set up a
  professional LinkedIn account. I will delete that connection if the LinkedIn activity contains unprofessional
  content.

## **Attendance Policy:**

Attendance in face-to-face courses and regular activity in online courses is essential to student success. If you have decided not to continue in a course, do not simply stop attending. You need to withdraw officially. Only students who withdraw from class will receive a grade of W. Otherwise, students will receive the grade they have earned. **Proposed Schedule:** Weekly/Unit outline with important due dates clearly indicated

	Topics	Outcomes	Reading & Assignments
Unit		Learning Objectives	
Unit 1 8/28-9/3	Introduction to Course Creating a Database	<ul> <li>The student will be able to define terms in the database environment.</li> <li>The student will be able to identify the components of the Access and Database windows.</li> </ul>	Read Syllabus     Discussion —     Introduction     Watch Mindtap     Introduction Video     Read Module 1     Complete Module 1     SAM Training
Jnit 2 9/4-9/10	Creating a Database	<ul> <li>The student will be able to create and navigate a form.</li> <li>The student will be able to open an existing query, and create, sort, and navigate a new query.</li> <li>The student will be able to open, navigate, and print a table.</li> <li>Learn how to manage a database by backing up, restoring, compacting, and converting a database.</li> <li>The student will be able to compact a database</li> <li>The student will copy records from another Access</li> </ul>	Submit Module 1     SAM Exam     Submit Module 1     Project 1     Submit Module 1     Project 2

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Uni		Learning Objectives		
Unit 3 9/11-9/17	Building a Database and Defining Table Relationships	<ul> <li>The student will learn the guidelines for designing databases and setting field properties</li> <li>The student will create a new database and create and save a table.</li> <li>The student will define fields and specify the primary key</li> <li>The student will modify the table structure.</li> <li>The student will delete, move, and add fields.</li> <li>The student will create field properties</li> <li>The student will define a relationship between two tables.</li> </ul>	1. Read Module 2 2. Submit Module 2 SAM Training. 3. Submit Module 2 SAM Exam 4. Submit Module 2 Project 1	
Unit 4 9/18- 9/24	Maintaining and Querying a Database	<ul> <li>The student will add, delete and change records.</li> <li>The student will learn how to use the Query window in Design view.</li> <li>The student will create, run and save queries.</li> <li>The student will update data using a query.</li> <li>The student will sort data in a query.</li> <li>The student will filter data in a query.</li> </ul>	Read Module 3     Submit Module 3     SAM Training.     Submit Module 3     SAM Exam     Submit Module 3     Project 1	
Unit 5 9/25-10/1	Maintaining and Querying a Database Creating Forms and Reports	<ul> <li>The student will create criteria using the And and Or logical operators in a query.</li> <li>The student will perform calculations in a query.</li> <li>The student will create a form using the Form Wizard.</li> <li>The student will navigate and find data using a form.</li> <li>The student will preview and print selected form records</li> <li>The student will create a form with a main form and a subform.</li> <li>The student will change a form's AutoFormat.</li> </ul>	1. Submit Module 3 Project 2 2. Read Module 4 3. Submit Module 4 SAM Training 4. Submit Module 4 SAM Exam	
Unit 6 10/2-10/8	Creating Forms and Reports Creating Advanced Queries and Enhancing Table Design	<ul> <li>The student will add a graphic image to a form</li> <li>The student will create a report using the Report Wizard.</li> <li>The student will insert a picture in a report</li> <li>The student will preview and print a report</li> <li>The student will be able to create preview, print and navigate a report.</li> <li>The student will use the In, Like, and Not operators in a query.</li> <li>The student will create multiple selection criteria in a query.</li> <li>The student will display related table records in a subdatasheet.</li> </ul>	1. Submit Module 4 Project 1 2. Submit Module 1-4 Capstone Project 3. Read Module 5 4. Submit Module 5 SAM Training	
Unit 7 10/9- 10/15	Creating Advanced Queries and Enhancing Table Design	<ul> <li>The student will create an input mask for a table field.</li> <li>The student will assign a conditional value to a calculated field.</li> </ul>	Submit Module 5     SAM Exam     Submit Module 5     Project 1     Submit Module 5     Project 2	

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	Topics	Outcomes	Reading & Assignments
Unit		Learning Objectives	
Unit 8 10/16- 10/22	Using Form Tools and Creating Custom Forms	<ul> <li>The student will design and create a custom form.</li> <li>The student will add, select, move, resize, delete, and rename controls.</li> <li>The student will add form headers and footers.</li> </ul>	Read Module 6     Submit Module 6     SAM Training     Submit Module 6     SAM Exam     Submit Module 6     Project 1
Unit 9 10/23-10/29	Using Form Tools and Creating Custom Forms Creating Custom Reports	The student will add calculated controls to a report.	Submit Module 6     Project 2     Read Module 7     Submit Module 7     SAM Training     Submit Module 7     SAM Exam
Unit 10 10/30- 11/5	Creating Custom Reports	<ul> <li>The student will design and create custom reports.</li> <li>The student will sort and group data in a report.</li> <li>The student will add, move, resize, and align controls in a report.</li> <li>The student will add the date, page number, and title to a report.</li> </ul>	Submit Module 7     Project 1     Submit Module 7     Project 2
Unit 11 11/6- 11/12	Sharing, Integrating, and Analyzing Data	The student will define relationships between tables	Read Module 8     Submit Module 8     SAM Training     Submit Module 8     SAM Exam     Submit Module 8     Project 1
Unit 12 11/13- 11/19	Sharing, Integrating, and Analyzing Data	The student will define relationships between tables	Submit Module 5-8     Capstone Project
Unit 13 11/20-11/26	Using Action Queries and Advanced Table Relationships	The student will create action queries The student will join tables	1. Read Module 9 2. Submit Module 9 SAM Training 3. Submit Module 9 SAM Exam 4. Submit Module 9 Project 1

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Unit	Topics	Outcomes  • Learning Objectives	Reading & Assignments
Unit 14 1/27-12/3	Automating Tasks with Macros	<ul> <li>The student will add a command button to a form.</li> <li>The student will add a list box to a form.</li> <li>The student will be introduced to SQL.</li> <li>The student will design a switchboard and dialog box for a graphical user interface.</li> </ul>	1. Read Module 10 2. Submit Module 10     SAM Training 3. Submit Module 10     SAM Exam 4. Submit Module 10     Project 1
Unit 15 12/4- 12/10	Appendix: Relational Databases and Database Design Review Exam #3	<ul> <li>The student will create a Lookup Wizard field in a table.</li> <li>The student will use filter by form</li> </ul>	1. Read Module 12 2. Submit Module 12 SAM Training 3. Submit Module 12 SAM Exam 4. Submit Module 12 Project 1 Final Project due by 12/15/18 @11:59 pm.