

## Tompkins Cortland Community College

# Master Course Syllabus

**Course Discipline and Number: CAPS 131**

**Course Title: Introduction to Databases**

**Year: 2019-2020**

**Credit Hours: 1**

**Attendance Policy:** *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

**Services for Students with Disabilities:** *It is the College's policy to provide, on an individual basis, reasonable accommodation to students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

### Course Description

An introduction to the operation and uses of a database management program. The student will learn how to create and manipulate a simple relational database using Access. Topics include creating and modifying tables, addition of and modification of data in tables, using queries to view data in one or more tables, use of forms to view and update tables, and creation of simple reports including mailing labels. Students taking this course in an online format must have access to a computer with Microsoft Access. Prerequisites: Familiarity working in a Microsoft Windows environment is recommended; ENGL 099 or prior completion or concurrent enrollment in ESL 120, 121, and 122 (or prior completion of ESL 103) if required by placement testing; prior completion or concurrent enrollment in MATH 090 and RDNG 116 if required by placement testing. 1 Cr. (2 Lec., 2 Lab. for 5 weeks) Fall and spring semesters.

### Course Context/Audience

This is an introductory course in the use of an electronic database that can be used to satisfy a CAPS elective or an unrestricted elective requirement. CAPS electives are required in many degree programs and should be accepted for transfer toward various computer literacy requirements.

### Basic Skills/Entry Level Expectations

- Writing:** W2 Student should have completed ENGL 099 (if needed). The course requires short written responses and/or short papers without documentation, particularly personal reflection or narrative.
- Math:** M1 If required, the student must be concurrently enrolled in MATH 090. Very basic mathematical skills are required.
- Reading:** R3 Course may be taken concurrently with RDNG 116.

### Course Goals

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

1. Open and view an existing database.
2. Create and name a new database.
3. Create one or more database tables, adding fields of various data types.
4. Add, update, and delete records of data in a database table.
5. Select and establish a primary key for a database table.
6. Change the properties of fields in a database table, such as format, size, caption, input mask, and default values.
7. Create and view simple one or two table queries, using sort fields or criteria to select a subset of data from a table.
8. Create and use a simple data entry form for a database table.
9. Create a simple report based on a database table or query.

**Course Objectives/Topics**

<b>Objective/Topic</b>	<b># Hours</b>
The student will be able to open and view a database and view and modify records of data within tables.	3 Hours
The student will be able to create and update tables; setting properties of fields in tables.	4 Hours
The student will be able to create and modify queries and filters using multiple tables in queries.	5 Hours
The student will be able to create forms from queries and tables using forms to update tables.	4 Hours
The student will be able to create, preview and print basic reports, using groups in reports and also create mailing labels.	4 Hours

**General Education Goals - Critical Thinking & Social/Global Awareness**

<b>CRITICAL THINKING OUTCOMES</b>	<b>HOW DOES THE COURSE ADDRESS THE OUTCOMES</b> (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<p>Students will be able to</p> <ul style="list-style-type: none"> <li>➤ develop meaningful questions to address problems or issues</li> <li>➤ gather, interpret, and evaluate relevant sources of information</li> <li>➤ reach informed conclusions and solutions</li> <li>➤ consider analytically the viewpoints of self and others</li> </ul>	<p>Students will be introduced to common problem solving methodologies. They should be required to demonstrate problem solving approaches and preparation prior to developing a solution. Lab exercises should provide opportunities for students to practice and develop problem solving skills.</p> <p>Students will be introduced to online knowledge bases and shown techniques for implementing previously written modules.</p> <p>Students will be walked through demonstrations from start to finish that encompass all areas of the software development life cycle.</p>
<b>SOCIAL/GLOBAL AWARENESS OUTCOMES</b>	<b>HOW DOES THE COURSE ADDRESS THE OUTCOMES</b> (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<ul style="list-style-type: none"> <li>➤ Students will begin to understand how their lives are shaped by the complex world in which they live.</li> <li>➤ Students will understand that their actions have social, economic and environmental consequences</li> </ul>	<p>Students will be presented with the concept of creating solutions to maximize efficiency of various common business tasks. Discussions of common business tasks and how software can contribute to streamlined functionality should be included. Handouts and assignments will be distributed or submitted electronically in order to conserve natural resources.</p>

**Instructional Methods**

The course is designed to be taught in a lecture/lab format with approximately 2 hours per week of lecture and 2 hours of lab. The instructor should demonstrate specific techniques using database software, and should provide examples of how databases can be used to provide meaningful information to the user. During lab sessions, the instructor should interact with students and assist them with problems they might have in completing the assignments. Web-based sections require that the instructor is available for questions and student interaction.

**Methods of Assessment/Evaluation**

Method	% Course Grade
Lab Problems/Exercises	40 - 60%
Final Exam or Final Project	40 - 50%
Quizzes (optional)	< = 20%

**Text(s)**

Microsoft Access 2007, (Advantage Series), Juarez, Jon, © 2008 McGraw-Hill.

**Bibliography**

Microsoft Access 2003: Complete Concepts and Techniques, Shelly, Cashman, Pratt, and Last. Thomson/Course Technology, © 2005.

Microsoft Access 2003 Inside Out, Viescas. Microsoft Press, © 2003.

New Perspectives on Microsoft Office Access 2003, Comprehensive, Adamski and Finnegan, 2nd edition, Thomson/Course Technology, © 2005.

**Other Learning Resources**

<b>Audiovisual</b> No resources specified
<b>Electronic</b> Mous.net Internet site for Microsoft Office User Specialist Testing
<b>Other</b> No resources specified