# **C:\Users\Kathy\Pictures\logo-horiz.gif *Fall 2022 Course Syllabus***

**CIS 245** (*Database Management Systems with SQL*)

# (section: ONL01)

**PROFESSOR:** Kathy Kelly

**OFFICE** : ATC 303

**ONLINE OFFICE HOURS :** Day/Time announced each week

How to contact me : **E-MAIL:** [kkelly1@mc3.edu](mailto:kkelly1@mc3.edu) ( reply within 24 hours on weekdays)

## ***Required Textbook:*** (ok to buy “used” or rent)

 Kroenke, David; Auer, David; Vandenberg, Scott; Yoder, Robert.

*Database Concepts,* 9th edition, Pearson, 2020*.*

***ISBN* 978-0135188149**

## ***Course Description:***

This course is designed to introduce the student to the concepts involved in designing and using a relational database management system. Topics to be covered in this course include database structures, database design and optimization techniques, and use of a standard query language to manipulate and maintain a database.

## ***Prerequisites:***

CIS 111 (Computer Science I: Programming and Concepts)

or CIS 1101 (Introduction to Problem Solving and Programming)

## ***Course Objectives:***

After completion of this course, the student should be able to successfully:

* Design a simple database for any situation in which they need to store data
* Create database tables and insert/delete data
* Optimize their database tables with the use of keys and indexes
* Manage and provide security for their database
* Query their database to get information to be used in reports
* Write Stored Procedures
* Apply SQL skills to any database environment - Oracle, SQL Server, …

***Course Policies & Procedures***

## ***Course Process:***

The course will be divided into “weeks”. Each week, you will be given a “to do” list on a certain day of that week and you will be expected to finish the required tasks within 7 calendar days (by 11:59 PM). In other words, you will have ONE week to complete the tasks. After that, any work will be considered late. There may be 1 or 2 weeks that are “shortened” weeks in which case assignments will be due in less than 7 days. See the Course Schedule below for the “weeks” for this semester.

## ***Grading:***

|  |  |
| --- | --- |
| **Requirement** | **Percent of Final Grade** |
| **Tests (4)** | **40%** |
| **Labs (10 x 2pts each)** | **20%** |
| **Final Exam** | **40%** |

## ***Important Grading Notes:***

* **Labs can NOT be handed in late.**

## ***Course Schedule:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Class Date*** | ***Topic*** | | ***Reference*** | ***Assignment*** |
| *Week #1:*  Wed., Aug 31  – Sun., Sep 4 | Course Introduction;  *“Getting Started” – Database Fundamentals* | | Syllabus;  **Chap 1 (p. 3-31)** | **LAB1:** assignment on BB |
| *Week #2:*  Mon., Sep 5  – Sun., Sep 11 | *“The Relational Model”; Normalization* | | **Chap 2 (p. 70-100);**  **Videos** | **LAB2:** assignment on BB |
| *Week #3:*  Mon., Sep 12  – Sun., Sep 18 | *Skip ahead to*  *“Data Modeling & the E-R Model”* | | *Skip ahead to*  Chap 4 (p. 273-302)  (SKIP CHAPTER 3) | **LAB3:** assignment on BB |
| *Week #4:*  Mon., Sep 19  – Sun., Sep 25 | TEST #2 (Chap 1,2, 4) | |  |  |
| *Week #5:*  Mon., Sep 26  – Sun., Oct 2 | **Go Back to**  ***“Structured Query Language”***  ***-- database programming*** | | **Go Back to**  **Chap 3 (p. 134-203)** | **LAB4:** assignment on BB |
| *Week #6:*  Mon., Oct 3  – Sun., Oct 9 | **More of**  ***“Structured Query Language”***  ***-- database programming*** | | **More of**  **Chap 3 (p. 134-203)** | **LAB5**: assignment on BB |
| *Week #7*:  Mon., Oct 10  – Sun., Oct 16 | **TEST #2 (Chap 3)** | |  |  |
| *Week #8*:  Mon., Oct 17  – Sun., Oct 23 | *“Advanced SQL”* | | **Online Extension “B”** | **LAB6**: assignment on BB |
| *Week #9:*  Mon., Oct 24  – Sun., Oct 30 | ***Stored Procedures with SQL Server: T-SQL*** | | **Videos/Powerpoints**  On Blackboard | **LAB7**:assignment on BB |
| *Week #10:*  Mon., Oct 31  – Sun., Nov 6 | | **TEST #3 ( “B”, T-SQL)** |  |  |
| *Week #11:*  Mon., Nov 7  – Sun., Nov 13 | | *“Database Administration”* | Chap 6 (p. 397-424) | **LAB8:** assignment on BB |
| *Week #12:*  Mon., Nov 14  – Sun., Nov 20 | | *“Data Warehouses, Business Intelligence Systems, & Big Data”* | **Chap 7 (p. 456-482)** | **LAB9:** assignment on BB |
| *Week #13:*  Mon., Nov 21  – Wed., Nov 23 | | ***“Advanced BI and Big Data”*** | Online Extension “C” | **LAB10:** assignment on BB |
| *THANKSGIVING BREAK (Thu., Nov 24 – Sun., Nov 27) – ENJOY* | | | | |
| *Week #14*:  Mon., Nov 28  – Sun., Dec 4 | | **Other Misc. Database Topics:**  **Using JDBC and Database Development within Java;** | **Videos/Powerpoints**  On Blackboard | **LAB11:** assignment on BB  (extra credit lab) |
| *Week #15:*  Mon., Dec 5  – Sun., Dec 11 | | **TEST #4(Chap 6, 7, “C”, JDBC);**  **Prep for Final Exam** | | |
| *Final Exam:*  Tues., Dec 13 OR  Wed., Dec 14 | | ***“Proctored” Final Exam on Zoom*** | | |

**College Policies & Resources**

***College Policies***

Students are expected to review, understand, and follow all College Policies. The current academic-related policies are in the [Policies](https://courses.mc3.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_42_1) tab on the top of the student’s Blackboard page or on the website under all College Policies (<https://www.mc3.edu/about-mccc/policies-and-procedures> ).

# ***Comprehensive Grading Policies***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **GRADED DESIGNATIONS** | | | **INSTITUTIONAL GRADING SCALE** | |
| **GRADES** | **QUALITY POINTS** | **DEFINITION** | **GRADES** | **NUMERICAL EQUIVALENCIES** |
| **A** | **4.00** | **SURPASSES EXPECTATIONS** | **A** | **93-100** |
| **A-** | **3.67** | **A-** | **90-92** |
| **B+** | **3.33** | **ABOVE EXPECTATIONS** | **B+** | **87-89** |
| **B** | **3.00** | **B** | **83-86** |
| **B-** | **2.67** | **B-** | **80-82** |
| **C+** | **2.33** | **MEETS EXPECTATIONS** | **C+** | **77-79** |
| **C** | **2.00** | **C** | **70-76** |
| **D** | **1.00** | **BELOW EXPECTATIONS** | **D** | **60-69** |
| **F** | **0.00** | **ACADEMIC FAILURE** | **F** | **0-59** |
| **XF** | **0.00** | **ACADEMIC MISCONDUCT** | **XF** | **0.00** |

# ***Student Success Resources***

# Students are expected to review and understand the resources that are available to you as a MontCo student to support your personal and academic growth and success. Summaries to the current resources are linked to the tab on the top of the student’s Blackboard page under [Student Success](https://courses.mc3.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_54_1). Additional Student resources can be found on the website under For students (<https://www.mc3.edu/resources-for/students>).

# ***Free Online Physical and Mental Health Resources for Students***

# The College provides all current students free and unlimited access to telehealth services through our partner, TimelyCare.  TimelyCare offers 24/7 virtual care from anywhere at no cost to you!  You will have access to counselors, doctors, nurse practitioners, and more to address concerns that can be safely diagnosed and treated remotely.  In addition, the MindWise Mental Health Screening confidential online tool and links to other community services are available on the College’s Health and Wellness page. The College’s Health and Wellness page can be accessed via the link “[Wellness Resources” i](https://www.mc3.edu/choosing-montco/resources-for-students/health-and-wellness)n Blackboard.  Recognizing when you need help and taking the steps to get it is a sign of strength that we support!  Signing up for TimelyCare and accessing MindWise is safe, quick, confidential, and totally free (if they are asking for a credit card, you are in the wrong place). If you have questions, please email [Wellness@mc3.edu](mailto:Wellness@mc3.edu).

## ***Class Attendance***

To be eligible for financial aid funds, you must begin attending all of your classes within 1-2 days of the first day of our start date. This entails more than merely showing up for the first session or clicking into the online course on the first day of the semester. If you are not attending, the College is obligated to drop you from the class. If you are attending but doing so irregularly you may be dropped from your class. If you are enrolled in an accelerated online, asynchronous course, attendance equals engagement in course-required activities, not just logging into the course. Please send me an email if you have questions regarding this policy.

# Sometimes circumstances change and plans have to change, too. Here are some things to keep in mind if you find yourself in this situation:

# ***Withdrawal from the Course***

Students initiate the process of course withdrawal after consultation with the instructor and/or an academic advisor/counselor. After the Add/Drop period ends and prior to completion of 60% of the course time, a student wishing to withdraw must submit an official drop/add/withdrawal form. An official grade of “W” (Withdrawal) is assigned to the course. After completion of 60% of the course time and prior to 75% of the course time the student must request and receive permission from the course instructor to withdraw from the course. The instructor completes an online Withdrawal Permission Form and indicates a final course status grade of “W” (Withdrawal). The College’s Registration Calendar outlines specific dates associated with the withdrawal process that must be followed.

***Withdrawal after Deadline***

# For a withdrawal after the deadline due to medical, catastrophic event or other circumstances beyond the student’s control, students can request a withdrawal with supporting documentation. View the Withdrawal section of the Comprehensive Grading policy on the College website.

***Library Services***

In addition to books and dvds, the College libraries provide outstanding online offerings, available 24/7 for current students, including: academic research databases, e-books, online journals, and streaming video. Help is available through online chat, in-person appointments, and at our service desks. The libraries also provide a peaceful place to study, use computers, and do research. To access the online library and for contact information, locations, and hours of operation, visit [library.mc3.edu](https://library.mc3.edu/).

***Emergency Closing Notification***

In the event of an emergency or weather-related closing, the College provides electronic notification for all students, employees, vendors and community members. All are encouraged to enroll in this free, up-to-the-minute electronic messaging service. Participants select their choice of delivery — cell phone or email. It is free to sign up but standard text messaging rates may apply from your service provider. To sign-up for electronic messaging or to update your current account, sign up through [https://www.mc3.edu/txt.](https://www.mc3.edu/choosing-montco/student-experience/campus-safety/emergency-text-alerts)

***Acceptable Use of Technology***

The College views technology and its use in instruction, in service delivery, in advising, in communications as a strategic asset. The College’s commitment to academic freedom and appreciation for creating an environment of free inquiry extends to the electronic information environment. Acceptable use policies preserve the stability and security of our information technology resources, protect the College from inappropriate use, and ensure reasonable accessibility to technology resources for our academic community. These policies govern desktop, network, email, telephone, internet, data security, and software uses of College-managed information technology equipment and resources. The full [Acceptable Use of Technology policy](https://www.mc3.edu/about-mccc/policies-and-procedures/acceptable-use-of-technology) is available on the College website.

***Registration Calendar***

The [Registration Calendar](https://www.mc3.edu/admissions/dates-and-deadlines) is available on the College website.