

MONTGOMERY COLLEGE
Rockville Campus
Engineering, Physical and Computer Sciences Department
CMSC246 Intro to SQL Using Oracle

Instructor Information

Name:
 Mailbox Location:
 Email:

Office Location:
 Office Phone:
 Office Hours:

Course Information

Semester:	Course CRN:
Class starts:	Class ends:
Midterm Exam:	Final Exam:
Check MyMC class schedule for your Specific Deadline to Drop without a grade W or to change from audit to credit or from credit to audit.	Check MyMC class schedule for your Specific Deadline to drop a class with a W grade.
Meets	Check MyMC class schedule for your Specific Refund Deadlines.

Course Description

Covers the concept, design, architecture, and components of the Oracle database system and SQL (Standard Query Language). Topics include the database design, the data definition language, the data manipulation language, the data control language, the basics of SQL*PLUS, and the standard SQL. Students create database tables, implement business requirements utilizing constraints, and develop complex queries using features such as join, union, and subqueries.

Assessment Level(s): ENGL 101/ENGL 101A, MATH 050, READ 120. Three hours each week. Formerly CS 270.

Course Outcomes

	Upon completion of the course, the student will be able to:	You will demonstrate this objective through:
1.	Apply commands within Oracle SQL*PLUS.	This is demonstrated in all homework assignments, progressing from simple to more complex. Each week you will learn new commands and features. You will test your understanding through quizzes. Then you will apply what you have learned by writing commands that use these features and the ones you have learned previously.
2.	Apply Data Manipulation, Data Control, and Data Definition Language to create and manipulate database tables, database records, and database functioning.	Home works 1- 8 focus on applying Data Manipulation Language to manipulate Database tables, records, and database functioning.

		<p>In addition, you will test your understanding through quizzes and discussions.</p> <p>Homework Assignments 1, 9, 10, 11, 12 focuses on applying Data Definition Language to create tables, and database functioning. In addition, you will test your understanding through quizzes and discussions.</p> <p>Practice Assignment 7 focuses on applying Data Control Language to database functioning. In addition, you will test your understanding through quiz and discussions.</p>
3.	Describe the basic architecture and components of the Oracle system.	This is demonstrated in all homework assignments. You will also test your understanding through quizzes.
4.	Describe the major tasks and steps of the database design.	This is demonstrated in all homework assignments. You will also test your understanding through quizzes.
5.	Develop queries and SQL scripts using basic record retrieval commands.	This is demonstrated in all homework assignments. You will also test your understanding through quizzes.
6.	Execute and test SQL and PL/SQL statements.	This is demonstrated in all homework assignments. You will also test your understanding through quizzes.
7.	Use transaction control commands to control database transactions.	This is demonstrated in all homework assignments. You will also test your understanding through quizzes.

Course Materials

Murach's Oracle SQL and PL/SQL, 2nd Edition

ISBN-13: 978-1-890774-80-6

Textbook and other materials may be purchased through the bookstore

Grade Basis

Final Exam	20%
Midterm Exam	10%
Quizzes	15%
Home and Class Work Assignments	40%
Discussions	15%
Total:	100%

Grading Scale:

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
Below 60%	F

General Class Policies

- ❖ No food or drink is permitted in any Montgomery College classroom at any time.
- ❖ You are responsible for all work missed, and for meeting assignment due dates when absent. Please call or email your instructor if you are going to be late or absent.
- ❖ You are strongly encouraged to contact your instructor at home by phone or e-mail if you are having difficulties, or have any questions about assignments.
- ❖ All assignments are expected to be the result of your own efforts, not the collaboration with others. Plagiarism or turning in an assignment which is essentially identical to that of another student will result in a zero for that assignment, with no opportunity to make up the grade.
- ❖ **Tardiness:** Class begins promptly at the scheduled time. Students are expected to be ON TIME.
- ❖ **Missed Tests, Quizzes, Assignments, and Discussions:** As a rule: NO MAKEUPS without a doctor's excuse. If the final exam is not taken, the student will receive a grade of F for the course.

Course Topics

Topics

- Chapter 1 An introduction to relational databases and SQL
- Chapter 2 How to use Oracle SQL Developer and other tools
- Chapter 3 How to retrieve data from a single table
- Chapter 4 How to retrieve data from two or more tables
- Chapter 5 How to code summary queries

- Chapter 6 How to code subqueries
- Chapter 7 How to insert, update, delete
- Chapter 8 How to work with data types and functions
- Chapter 9 How to design a database
- Chapter 10 How to create tables, indexes, and sequences
- Chapter 11 How to create views
- Chapter 12 How manage database security