

COURSE SYLLABUS

COM232: Introduction to SQL

Concepts Course Description

Structured Query Language (SQL) forms the cornerstone of all relational database operations. Databases organize and collect your data, and the SQL language is the liaison between you and the data. This course provides a solid foundation of the SQL programming language that enables students to build, query and manipulate databases.

General Course Information

Number of Units/Weeks	4/10
#Hours Lecture/#Hours Laboratory/#Hours HW*	40/0/80
Prerequisite(s)	none
Co-requisites (s)	N/A
Course Developer(s)	Charlie Morgan, AB. BS.
Date Approved / Last Review	???

* Homework

Learning Outcomes

Upon completion of this course the student will

- CLO 1: describe the structure of a relational database including key relationships.
- CLO 2: define the datatypes available in a relational database.
- CLO 3: demonstrate accessing a relational database
- CLO 4: create a relational database using a prewritten script
- CLO 5: design queries that manipulate the data in a single table
- CLO 6: manipulate the data in multiple tables
- CLO 7: use SQL functions

Instructional Methods Employed in this Course

Lecture and reading assignments

Collaborative Learning

Hands-on exercises

Research

Practical application of theory and skills in authentic projects

Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course



Textbook

Murach, Joel (2015). Murach's MySQL (2nd Ed). USA: Mike Murach and Associates, Inc. ISBN: 978-890774-82-0



Recommended Readings

DuBois, P. et al. (2006). MySQL 5 Certification Study Guide. USA: Pearson Ed. ISBN: 978-0672328121



Web Site Readings

MySQL Reference Manual. Retrieved from

<https://dev.mysql.com/doc/refman/5.7/en/>

Tutorials (33). Retrieved from:

<https://www.youtube.com/playlist?list=PL32BC9C878BA72085>

Tutorials (18). Retrieved from:

<https://www.youtube.com/watch?v=iP1wOSsKjW8&list=PLS1QuIW01RlahlYDqHWZb81qsKgEvPiHn>

Table/Topics & Assignments

Types of Assignments:

Lecture -

Considered Lecture Hours

Classroom Discussion -

Considered Lecture Hours

In Class Critique -

Considered Lecture Hours

In Class (IC) Exercise -

Considered Lecture Hours

Reading -

Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) -

Considered Homework (HW), work done outside of class

Projects –

Considered Homework (HW), work done outside of class

Lab Work –

Considered Lab Hours

Quiz, Midterm or Final -

Considered Lecture Hours

Course Structure

Week 1						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH1	Chapter 1			2.9		
Lec1	Intro to Relational Databases and MySQL	3				
Read	Appendix A			0.8		
CLCh1	Installation and setup of mySQL	1			15	Week 2
Quiz Ch1	Quiz Chapter 1			2	20	Week 2
Total Week 1		4	0	5.7	35	
Week 2						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH2	Chapter 2			2.6		
Lec2	Using MySQL development tools	3				
CLCh2	Collaborative Lab AP* Exercises 2.1- 2.16	1		2.5	25	Week 3
P1	Project 1 OM** Exercises 2.1-2.18			5	50	Week 3
Quiz Ch2	Quiz Chapter 2			2	20	Week 3
Total Week 2		4	0	12.1	95	
Week 3						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH3	Chapter 3			3.4		
Lec 3	How to retrieve data from a single	3				
CLCh3	Collaborative lab AP Exercises 3.1- 3.12	1		2.5	25	Week 4
P2	Project 2 OM Exercises 3.1 – 3.8			5.5	55	Week 4
Quiz Ch3	Quiz Chapter 3			2	20	Week 5
Lab 2	Query Practice					
Total Week 3		3	0	13.4	100	
Week 4						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH4	Chapter 4			3.6		

Lec 4	How to retrieve data from multiple tables	3				
CL4	Collaborative lab AP exercises 4.1 – 4.7	1		2.5	25	Week 5
P3	Project 3 OM exercises 4.1- 4.7			5.5	55	Week 5
Quiz Ch4	Quiz Chapter 4			2	20	Week 5
Total Week 4		4	0	13.6	100	
Week 5						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Midterm	Midterm review	4				
	Midterm				150	Week 5
Total Week 5		4	0		150	
Week 6						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH5	Chapter 5			1.9		
Lec 5	Insert, Update, Delete	3				
CL5	Collaborative lab AP Exercises 5.1 -5.9	1		2.5	25	Week 7
P4	Project 4 OM exercises 5.1 – 5.6			5.5	55	Week 7
Quiz Ch5	Quiz Chapter 5			2	20	Week 7
Total Week 6		4	0	11.9	100	
Week 7						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH6	Chapter 6			1.7		
Lec 6	Summary Queries	3				
CL6	Collaborative lab AP 6.1 – 6.7	1		2.5	25	Week 8
P5	Project 5 OM exercises 6.1 – 6.7			5.5	55	Week 8
Quiz Ch 6	Quiz Chapter 6			2	20	Week 8
Lab 4	Query Practice					
Total Week 7		4	0	11.7	100	
Week 8						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH7	Chapter 7			1.7		

Lec 7	Subqueries	3				
CL7	Collaborative lab AP 7.1 – 7.8	1		2.5	25	Week 9
P6	Project 6 OM exercises 7.1 – 7.10			5.5	55	Week 9
Quiz Ch7	Quiz Chapter 7			2	20	Week 9
Total Week 8		4	0	11.7	100	
Week 9						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Read CH8	Chapter 8			2.5		
Lec 8	How to work with data types	3				
CL8	Collaborative Lab AP exercises 8.1 – 8.2	1		2.5	15	Week 10
P7	Project 7 OM 8.1 - 8.2			3.5	35	Week 10
Quiz Ch8	Quiz Chapter 8			2	20	Week 10
L5	Query Practice					
Total Week 9		4	0	10.5	70	
Week 10						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Final		4			150	Week 10
Total Week 10		4				

* Accounts Payable Database

** My Guitar Shop Database

Course Hours Summary

Week	Topic	LEC Hours	LAB Hours	HW Hours
1	Introduction of databases and SQL	4	0	5.7
2	Using MySQL development tools	4	0	12.1
3	How to retrieve data from a single table	4	0	13.4
4	How to retrieve data from multiple tables	4	0	13.6
5	Midterm	4	0	0
6	Insert, Update, Delete	4	0	11.9
7	Summary queries	4	0	10.7
8	Subqueries	4	0	11.7
9	How to work with datatypes	4	0	10.5
10	Final	4	0	0
Total		40	20	89.6

Table/Point Breakdown

Week	Assignment	Possible Points	Percent of Grade
1	Installation and setup of MySQL	15	1.5
1	Quiz Chapter 1	20	2.0
2	Collaborative lab Chapter 2	25	2.5
2	Project 1	50	5.0
2	Quiz Chapter 2	20	2.0
3	Collaborative lab Chapter 3	25	2.5
3	Project 2	55	5.5
3	Quiz Chapter 3	20	2.0
4	Collaborative lab Chapter 4	25	2.5
4	Project 3	55	5.5
4	Quiz Chapter 4	20	2.0
5	Midterm	150	15.0
6	Collaborative lab Chapter 5	25	2.5
6	Project 4	55	5.5
6	Quiz Chapter 5	20	2.0
7	Collaborative lab Chapter 6	25	2.5
7	Project 5	55	5.5
7	Quiz Chapter 6	20	2.0
8	Collaborative lab Chapter 7	25	2.5
8	Project 6	55	5.5
8	Quiz Chapter 7	20	2.0
9	Collaborative lab Chapter 8	15	1.5
9	Project 8	35	3.5
9	Quiz Chapter 8	20	2.0
10	Final	150	15.0
Total		1000	00%

Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices
Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	A	4
90-93	A-	3.67

87-89	B+	3.33
84-86	B	3
80-83	B-	2.67
77-79	C+	2.33
74-76	C	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend	
CR = Credit	NC = No Credit
I = Incomplete	Withdrawal
AU = Audit	TR = Transfer Credit
WV = Waiver	

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.