

Introduction to Oracle SQL (ITSE 1445)



Credit: 4 semester credit hours (3 hours lecture, 2 hours lab)

Prerequisite/Co-requisite: ITSW 1307

Course Description

An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL).

Required Textbook and Materials

1. *SQL Power! : The Comprehensive Guide* by H. Kenneth, 7th Edition.
 - a. ISBN number is 13:9781598632125
2. USB Flash Memory drive.

Course Objectives

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

1. Write Structured Query Language (SQL) statements using Oracle. (SCANS:C5, C6, C8, C9, C19, F1, F2, F3, F9)
2. Select and sort data. (SCANS: C5, C6, C8, C9, F9)
3. Produce reports with SQL*Plus. (SCANS: C5, C6, C8, C9, F2, F3, F9)
4. Plan, define, and design a database; generate tables, queries, and forms. (SCANS: C5, C6, C8, C9, F1, F2, F3, F9)
5. Create and manage tables which include constraints. (SCANS: C5, C6, C8, C9, F9)
6. Create Views and other database objects. (SCANS: C5, C6, C8, C9)

SCANS Skills and Competencies

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies.

Course Outline

- A. SQL the Language
1. SQL Defined
 2. SQL Standards

- B. Relational Databases
1. Tables
 2. Primary Keys

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Course Syllabi

- C. Database Software
 - 1. Microsoft SQL Server
 - 2. Oracle
 - 3. MySQL
- D. Data Definition Language
 - 1. Creating a Database & Tables
 - 2. Dropping a Database & Tables
 - 3. Altering a Database & Tables
- E. MY SQL
 - 1. Types of Tables
 - 2. MySQL Table Types
- F. Data Manipulation Language
 - 1. Insert Function
 - 2. Select Function
 - 3. Update Function
- G. Data Control Language
 - 1. Access Controls
 - 2. Transaction Controls
- H. Advanced Queries
 - 1. Multi-Table Queries
 - 2. JOIN Command
 - 3. Unions

Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Daily work	60%
2. Quizzes	5%
3. Test & Final	15%
4. Group Project	20%

Course Requirements

- 1. Create ER Diagram for Database.
- 2. Group Project.
- 3. Use MySQL to create Databases.
- 4. Use MySQL to create Reports, Queries, Forms

Course Policies

- 1. No food, drinks, or use of tobacco products in class.
- 2. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.
- 3. Do not bring children to class.
- 4. No late assignments will be accepted. Any assignment submitted after the Blackboard cut-off time will result in a '0'.

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5. **Tests.** Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.
6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
7. Test will be closed book/note and will test information in assigned chapters and material discussed in class.
8. All assignments will be completed using either Blackboard. Assignment may NOT be submitted via email
9. The materials for this course are mandatory. A student not acquiring these materials will not be able to PASS this course.
10. Data files can be located on the CD provided with the textbook or on the publisher's resource website or under the download section in Blackboard.
11. **Attendance:** Students should be present and punctual for all classes. Two absences are allowed. The first absence incurred after the initial two absences will result in the loss of one letter grade. Each absence after that will result in deducting half a letter grade from your overall grade.
12. **Tardiness:** If tardy, enter quietly and do not disturb the class. Students that are tardy or miss a class are responsible for all work and/or discussion missed. The student is responsible to obtain missed material from a classmate. **Do not expect your instructor to repeat a lecture & do not interrupt your instructor.**
13. Do not talk, type, or print while the instructor is talking to the class or when a student is asking a question that pertains to the class.
14. Refrain from "surfing" the Web during class, unless directed by your instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

Refer to Blackboard for actual assignments and due date.

Week of	Topic	Reference
Week 1	Course introduction and policies Blackboard Navigation, Software Install	
Week 2	CH1: Intro to MySQL Language	pp. 1-17

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Week 3	CH2: Relational Databases	pp. 19-33
Week 4	CH3: Database Software	pp. 35-58
Week 5	CH4: Data Definition Language	pp. 59-80
Week 6	CH4 Continued	pp. 59-80
Week 7	Review & First Test	pp. 1-80
Week 8	CH5: MySQL	pp. 83-99
Week 9	Second Test	pp. 83-99
	CH6: Data Manipulation Language	pp. 101-126
Week 10	Third Test	
	CH7: Data Control	pp. 127-149
Week 11	CH7 Continued	pp. 127-149
Week 12	CH8: Advanced Queries	pp. 151-180
Week 13	CH9: Views	pp. 181-197
Week 14	CH11: Normalization	pp. 227-233
	Start Group Project	
Week 15	Group Project Work Week	
Week 16	Finish Project	
	Final Exam	

Contact Information:

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