

# uCertify

## Course Outline

**[ORACLE PRESS] Oracle Database SQL**



10 May 2024

1. Pre-Assessment

2. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

3. Expert Instructor-Led Training

4. ADA Compliant & JAWS Compatible Platform

5. State of the Art Educator Tools

6. Award Winning Learning Platform (LMS)

7. Chapter & Lessons

Syllabus

Chapter 1: Oracle and Structured Query Language (SQL)

Chapter 2: Using DDL Statements to Create and Manage Tables

Chapter 3: Manipulating Data

Chapter 4: Restricting and Sorting Data

Chapter 5: Using Single-Row Functions to Customize Output

Chapter 6: Using Conversion Functions and Conditional Expressions

Chapter 7: Reporting Aggregated Data Using the Group Functions

Chapter 8: Displaying Data from Multiple Tables

Chapter 9: Using Subqueries to Solve Queries

Chapter 10: Managing Schema Objects

Chapter 11: Using the Set Operators

Chapter 12: Managing Objects with Data Dictionary Views

Chapter 13: Manipulating Large Data Sets

Chapter 14: Controlling User Access

Videos and How To

8. Practice Test

Here's what you get

Features

9. Live labs

Lab Tasks

Here's what you get

## 1. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

## 2. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

**211**

QUIZZES

## 3. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

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FLASHCARDS

## 4. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



## 5. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 6. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 7. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 8. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution

6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 9. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

# Syllabus

## Chapter 1: Oracle and Structured Query Language (SQL)

- The Exam: An Overview
- Identify the Connection Between an ERD and a Relational Database
- Explain the Relationship Between a Database and SQL
- Describe the Purpose of DDL
- Describe the Purpose of DML
- Build a SELECT Statement to Retrieve Data from an Oracle Database Table
- Certification Summary
- Two-Minute Drill

## Chapter 2: Using DDL Statements to Create and Manage Tables

- Categorize the Main Database Objects
- Create a Simple Table
- Review the Table Structure
- List the Data Types That Are Available for Columns
- Explain How Constraints Are Created at the Time of Table Creation

- Drop Columns and Set Column UNUSED
- Create and Use External Tables
- Certification Summary
- Two-Minute Drill

## Chapter 3: Manipulating Data

- Truncate Data
- Insert Rows into a Table
- Update Rows in a Table
- Delete Rows from a Table
- Control Transactions
- Certification Summary
- Two-Minute Drill

## Chapter 4: Restricting and Sorting Data

- Sort the Rows That Are Retrieved by a Query
- Limit the Rows That Are Retrieved by a Query
- Use Ampersand Substitution to Restrict and Sort Output at Run Time
- Use the SQL Row Limiting Clause



- Certification Summary
- Two-Minute Drill

## Chapter 5: Using Single-Row Functions to Customize Output

- Use Various Types of Functions That Are Available in SQL
- Use Character, Number, Date, and Analytical (PER...TDDEV, LAG, LEAD) Functions in SELECT Statements
- Certification Summary
- Two-Minute Drill

## Chapter 6: Using Conversion Functions and Conditional Expressions

- Describe Various Types of Conversion Functions
- Use the TO\_CHAR, TO\_NUMBER, and TO\_DATE Conversion Functions
- Apply General Functions and Conditional Expressions in a SELECT Statement
- Certification Summary
- Two-Minute Drill

## Chapter 7: Reporting Aggregated Data Using the Group Functions

- Describe the Use of Group Functions

- Group Data by Using the GROUP BY Clause
- Include or Exclude Grouped Rows by Using the HAVING Clause
- Certification Summary
- Two-Minute Drill

## Chapter 8: Displaying Data from Multiple Tables

- Describe the Different Types of Joins and Their Features
- Use SELECT Statements to Access Data from More Than One Table Using Equijoins and Non-Equijoins
- Join a Table to Itself by Using a Self-Join
- View Data That Generally Does Not Meet a Join Condition by Using Outer Joins
- Certification Summary
- Two-Minute Drill

## Chapter 9: Using Subqueries to Solve Queries

- Define Subqueries
- Describe the Types of Problems Subqueries Can Solve
- Describe the Types of Subqueries
- Query Data Using Correlated Subqueries

- Update and Delete Rows Using Correlated Subqueries
- Use the EXISTS and NOT EXISTS Operators
- Use the WITH Clause
- Write Single-Row and Multiple-Row Subqueries
- Certification Summary
- Two-Minute Drill

## Chapter 10: Managing Schema Objects

- Describe How Schema Objects Work
- Create Simple and Complex Views with Visible/Invisible Columns
- Create, Maintain, and Use Sequences
- Create and Maintain Indexes Including Invisible Indexes and Multiple Indexes on the Same Columns
- Perform Flashback Operations
- Certification Summary
- Two-Minute Drill

## Chapter 11: Using the Set Operators

- Describe Set Operators

- Use a Set Operator to Combine Multiple Queries into a Single Query
- Control the Order of Rows Returned
- Certification Summary
- Two-Minute Drill

## Chapter 12: Managing Objects with Data Dictionary Views

- Query Various Data Dictionary Views
- Certification Summary
- Two-Minute Drill

## Chapter 13: Manipulating Large Data Sets

- Describe the Features of Multitable INSERTs
- Merge Rows into a Table
- Certification Summary
- Two-Minute Drill

## Chapter 14: Controlling User Access

- Differentiate System Privileges from Object Privileges
- Grant Privileges on Tables and on a User

- Distinguish Between Privileges and Roles
- Certification Summary
- Two-Minute Drill

## 10. Practice Test

**Here's what you get**



### **Features**

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

#### **Unlimited Practice**

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 11. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

### Lab Tasks

#### **Oracle and Structured Query Language (SQL)**

- Normalizing a Table
- Creating a Table and Inserting Records in it

#### **Using DDL Statements to Create and Manage Tables**

- Altering the Table
- Adding a Foreign Key
- Dropping a Primary Key and Adding a Unique Key
- Viewing the Table Structure
- Creating a Table Using the CLOB Data Type
- Creating a Table Using Constraints
- Dropping a Column

#### **Manipulating Data**

- Truncating a Table
- Inserting Records in the Existing Table

- Updating a Record in the Table
- Deleting a Record from the Table
- Using the Commit and Rollback Statements

### **Restricting and Sorting Data**

- Sorting the Result
- Using the Boolean Operator
- Using the LIKE Operator
- Using the ACCEPT and PROMPT Statements
- Using the Fetch Statement
- Using the WITH TIES Clause
- Using the OFFSET-FETCH Clause

### **Using Single-Row Functions to Customize Output**

- Using the INITCAP Function
- Using the STDDEV Function
- Using the LEAD and LAG Functions
- Using the REMAINDER Function
- Using the SUBSTR Function
- Using the RTRIM Function
- Using the CONCAT Function

### **Using Conversion Functions and Conditional Expressions**

- Using the Implicit and Explicit Conversions
- Using the TO\_DATE Function
- Using the TO\_CHAR Function
- Using the TO\_NUMBER Function
- Using the NVL Function
- Using the Case Statement

### **Reporting Aggregated Data Using the Group Functions**

- Using the GROUP BY Clause
- Using the HAVING Clause

### **Displaying Data from Multiple Tables**

- Using the INNER JOIN Operation
- Creating a Table Using Records of Another Table
- Using the NATURAL JOIN Operation
- Using the LEFT OUTER JOIN and RIGHT OUTER JOIN Operation

### **Using Subqueries to Solve Queries**

- Deleting Rows Using a Correlated Subquery
- Using the WITH Clause
- Using the Multiple-Row Subquery

### **Managing Schema Objects**

- Creating a View
- Dropping a View
- Creating and Using a Sequence
- Restoring the Table Using Flashback
- Dropping a Table
- Dropping a Unique Index
- Altering a Unique Index
- Creating a Unique Index
- Creating an Implicit Index

### **Using the Set Operators**

- Using the UNION Operator

### **Managing Objects with Data Dictionary Views**

- Adding the Comment to a Table

### **Manipulating Large Data Sets**

- Using the Multitable INSERT Statement
- Using the Conditional Multitable INSERT Statement



## Controlling User Access

- Creating a Database User and Granting Privileges
- Granting Public Synonym Privileges to a User
- Revoking Privileges from a User
- Dropping the Database User

## Here's what you get

**60**

LIVE LABS

**121**

VIDEO TUTORIALS

**02:06**

HOURS

**GET IN TOUCH:**



3187 Independence Drive  
Livermore, CA 94551,  
United States



+1-415-763-6300



support@ucertify.com



www.ucertify.com