# uCertify Course Outline

# Pracle Database 12c: SQL Fundamentals (1Z0-061)



01 May 2024

- 1. Course Objective
- 2. Pre-Assessment
- 3. Exercises, Quizzes, Flashcards & Glossary Number of Questions
- 4. Expert Instructor-Led Training
- 5. ADA Compliant & JAWS Compatible Platform
- 6. State of the Art Educator Tools
- 7. Award Winning Learning Platform (LMS)
- 8. Chapter & Lessons

Syllabus

- Chapter 1: Introducing Oracle Database 12c RDBMS Oracle Database 12c
- Chapter 2: Introducing SQL
- **Chapter 3: Using Single-Row Functions**
- Chapter 4: Using Group Functions
- Chapter 5: Using Joins and Subqueries
- Chapter 6: Manipulating Data
- **Chapter 7: Creating Tables and Constraints**
- Chapter 8: Video Tutorials

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Here's what you get

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Get certified for the Oracle Database certification exam with the Oracle Database 12c: SQL Fundamentals (1Z0-061) course and lab. The lab provides a hands-on learning experience in a safe, online environment. The Oracle database course offers complete coverage of the 1Z0-061 exam objectives and provides expertise on topics such as SQL, data manipulation, table and constraints creation; and more. The database online course goes beyond traditional Oracle exam preparation to strengthen your knowledge in all aspects of a relational database.

# 2. 🔁 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.

# 3. **Exercises**

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.





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.



# 5. J 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.



# 6. 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.



# 7. 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.

# 8. ( 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.

# 9. It 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.

# 10. 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

# 11. <sup>(B)</sup> 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: Introducing Oracle Database 12c RDBMS Oracle Database 12c

- Relational Database Management Systems
- The Oracle Database 12c
- Becoming Familiar with SQL\*Plus

- Summary
- Exam Essentials

#### Chapter 2: Introducing SQL

- SQL Fundamentals
- Writing Simple Queries
- Accepting Values at Runtime
- Summary
- Exam Essentials

#### Chapter 3: Using Single-Row Functions

- Single-Row Function Fundamentals
- Using Single-Row Character Functions
- Using Single-Row Numeric Functions
- Using Single-Row Date Functions
- Using Single-Row Conversion Functions
- Using Other Single-Row Functions
- Summary

• Exam Essentials

#### Chapter 4: Using Group Functions

- Group Function Fundamentals
- Utilizing Aggregate Functions
- Summary
- Exam Essentials

#### Chapter 5: Using Joins and Subqueries

- Writing Multiple-Table Queries
- Using Set Operators
- Using Subqueries
- Summary
- Exam Essentials

#### Chapter 6: Manipulating Data

- Using DML Statements
- Understanding Transaction Control
- Summary

• Exam Essentials

#### Chapter 7: Creating Tables and Constraints

- Database Objects Overview
- Built-in Datatypes
- Creating Tables
- Modifying Tables
- Managing Constraints
- Summary
- Exam Essentials

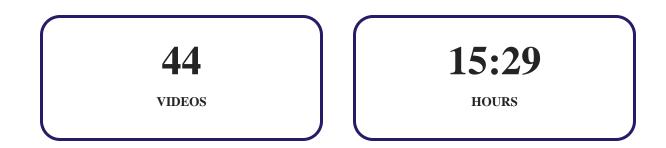
#### Chapter 8: Video Tutorials

- Introduction
- Oracle 12c- SQL Fundamentals
- Basic Select Statements
- Using the Where Clause
- The Order By Clause
- Left And Right Outer Joins

- Multi-Table Selection Demo
- SQL Functions
- Using Group By clause
- Conversion Functions
- Subqueries
- Data Modification
- Implementing Security
- Creating Objects In The Database
- Using Sequences
- Indexes
- Views
- Combining Queries
- Oracle 12c SQL Fundamentals Review

## **Videos and How To**

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.



12. OPractice 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.



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

#### Introducing Oracle Database 12c RDBMS Oracle Database 12c

- Connecting to a Database
- Saving the SQL Buffer
- Clearing the SQL Buffer

#### Introducing SQL

- Creating a Table
- Inserting Data Into a Table
- Converting the String to the DATE Data Type
- Retrieving Data Using the SQL SELECT Statement
- Using the WHERE Clause
- Using the IN Operator
- Using the NULL Values in the SELECT Statement
- Using the Column Aliases
- Using the Concatenation Operator
- Using the DESCRIBE Command

- Using the DISTINCT Keyword
- Using the INEQUALITY Operator
- Using the Less Than Operator
- Using the Greater Than Operator
- Using the ANY Operator
- Using the ALL Operator
- Using the NOT Operator
- Using the AND Operator
- Using the BETWEEN Operator
- Using the EXISTS Operator
- Using the FETCH Clause
- Using the WITH TIES Clause
- Using the OFFSET-FETCH Clause
- Using the CASE Statement
- Using the Runtime Query

#### **Using Single-Row Functions**

- Using the UPPER Function
- Using the SUBSTR Function
- Using the ROUND Function
- Using the TRUNC Function
- Using the Single-Row Date Function
- Using the ASCII Function
- Using the DECODE Function

#### **Using Group Functions**

- Retrieving Unique Columns
- Using the average Function
- Using the MIN Function
- Using the MEDIAN Function
- Using the LISTAGG Function

#### **Using Joins and Subqueries**

- Retrieving data using the INNER JOIN operator
- Using the Self Join
- Using the FULL OUTER JOIN
- Using the MINUS Operator
- Using the INTERSECT operator
- Using a Subquery
- Using the UNION Operator
- Creating a View
- Using the WITH Clause
- Using the GROUP BY Clause
- Using the HAVING Clause

#### **Manipulating Data**

- Updating a Table
- Deleting Rows from a Table
- Deleting Data from a Table
- Using the MERGE Statement
- Locking a Table

#### **Creating Tables and Constraints**

- Creating a Sequence
- Inserting Data Into a Table Using Sequence
- Retrieving the Next Value of Sequence
- Creating an Index
- Using the CREATE SYNONYM Statement
- Creating a Table with the INTERVAL Datatype
- Creating a Table from Another Table
- Creating a Table with Default Values
- Creating a Table with an Invisible Column
- Dropping a Table
- Renaming a Table
- Adding a Column

## Here's what you get





After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

