Database Management Systems



IT 222 / CRN# 43198
Spring '21
James Hart
Email: hart56@unm.edu

Phone or txt: 505.239.3435
Flexible Contact Hours
MWTTh 10:00 AM – 2:00 PM
or ARR

COURSE DESCRIPTION

This course is a continuation of IT 122. Students will write more complex generic and reusable DBMS SQL programs to prepare for the Oracle's 1Z0-071 SQL Certification. Prerequisite: IT 122.

EMAIL

Be sure to check your contact information in Banner and keep it updated. UNM email as our official form of course communication. When communicating with your instructor always include class name in the subject header.

Student Learning Outcomes/Course Objectives: course objectives posted in class https://learn.unm.edu page

TECHNICAL SKILLS

In order to participate and succeed in this class, you will need to be able to perform the following basic technical tasks:

- Use UNM Learn (help documentation located in "How to Use Learn" link on left course menu, and also at <u>Online Student Documentation</u>). Also, UNM-Valencia provides a Blackboard Learn Jumpstart self-learning module to give you practice with the most commonly used tools in UNM Learn. Ask your instructor if you do not see the UNM-Valencia Blackboard Learn Jumstart in your list of classes in UNM Learn.
- Use email including attaching files, opening files, downloading attachments
- Copy and paste within applications including Microsoft Office
- Open a hyperlink (click on a hyperlink to access a website or online resource)
- Create, download, update, save and upload MS Word documents
- Use the in-course web conferencing tool (Collaborate Web Conferencing software in UNM Learn) or use Zoom or other web conferencing tool
- Download and install an application or plug in required for participating in web conferencing sessions

TECHNICAL REQUIREMENTS

Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include: <u>Detailed Supported Browsers and Operating Systems</u>
- Any computer capable of running a recently updated web browser should be sufficient to access your online course. However, bear in mind that processor speed, amount of RAM and Internet connection speed can *greatly* affect performance.
- For the best experience when using the Kaltura Media Tools inside UNM Learn, be sure to use a <u>supported browser</u> on a desktop.
- Microsoft Office products are available free for all UNM students (more information on the <u>UNM IT Software Distribution and Downloads page</u>)
- Please update your contact information in Loboweb: <u>MyUNM Login</u>. When you log into MyUNM, Enter LoboWeb. Click on the Personal Information link to make sure your contact information is up to date.

Web Conferencing

Web conferencing will be used in this course during the following times and dates: For the online sessions, you will need:

- A USB headset with microphone. Headsets are widely available at stores that sell electronics, at the UNM Bookstore or online.
- A high-speed internet connection is highly recommended for these sessions. A
 wireless Internet connection may be used if successfully tested for audio quality
 prior to web conferencing.
- You should also dress as you would when attending an in-person class, even if you do not turn on your video camera.

Technical Support

- For UNM Learn Technical Support: (505) 277-0857 (24/7) or use the "Create a Tech Support Ticket" link in your course.
- For UNM-Valencia IT Support: (505)925-8911
- For UNM Web Conference Technical Help: (505) 277-0857
- Any Oracle Academy problems CONTACT ME

TEXTBOOK AND SUPPLEMENTAL MATERIALS

Required Textbooks:

All relevant class materials are located on the http://academy.oracle.com website

Supplementary Materials:

There are wide variety of disciplines in Linux. Once you have a basic understanding of its concepts I would be happy to recommend other materials.

COURSEWORK AND PARTICIPATION

Instructor Response Time

I routinely check the course for postings or emails, Monday through Friday between 7:00 and 10:00 AM. You can anticipate a 24 to 48 hour response from me. If you MUST contact me, please text, but don't forget I sleep too.

Procedures for Completing Coursework

- The Section quizzes are on and can be taken more multiple times. The midterm and final can also be retaken but only twice, you have 1 week to complete. If you want to retake a test, notify me and I'll enable it again.
- Save your sql queries in APEX to document you server usage
- If you have difficulty with any of the Section quizzes or APEXr BE SURE to notify me immediately

Course Schedule

There will be one to two recorded lectures per week. Each lecture will have a phrase (ex. It's hot). Who knows where it will appear. To get credit for the lecture you must email me the phrase. The phrase could be anywhere in the lecture.

Expectations for Participation

- time required (9-12 hrs per week)
- students are expected to learn how to navigate in Learn
- students are expected to keep abreast of course announcements
- students are expected to use the Learn course email as opposed to a personal email address
- students are expected to keep instructor informed of class related problems, or problems that may prevent the student from full participation
- students are expected to address technical problems immediately
- students are expected to observe course netiquette at all times

Netiquette

• Netiquette document

NOTES TO STUDENTS ABOUT PARTICIPATION IN A COURSE USING UNM LEARN:

Tracking Course Activity

UNM Learn and Cisco Academy automatically records all students' activities including: your first and last access to the course, the pages you have accessed, the number of discussion messages you have read and sent, web conferencing, discussion text, and posted discussion topics. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty

Grading Scale

Practices/Project	20%	A 90 +
APEX Usage	20%	B 80 - 89
Section quizzes	10%	C 70 - 79
Mid Term	20%	D 60 -69
Final	30%	F < 60
Total	100%	

UNM POLICIES

Equal Opportunity and Non-Discrimination

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the <u>Department of Education</u> (see pg. 15). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity.

Read more about campus policy regarding sexual misconduct.

Copyright Issues

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

The UNM Copyright Guide has additional helpful information on this topic.

Accessibility and Accommodations

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring accommodation, please contact:

- <u>UNM-Valencia Student Services</u> if you are a Valencia campus student. The phone number is 505-925-8560
- <u>UNM Accessibility Resource Center</u> in 2021 Mesa Vista Hall if you are a main campus student. The phone number is 505-277-3506.

Information about your disability is confidential and your instructor cannot refer you for accommodations. Be aware that you will need to provide documentation. If you need assistance in obtaining documentation, the offices above can assist you.

Academic Integrity

You should be familiar with UNM's Policy on Academic Dishonesty and the Student Code of Conduct which outline academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

Drop Policy:

[This section states your departmental policy for dropping students – edit or include your own statement.]

UNM Policies: This course falls under all UNM policies for last day to drop courses, etc. Please see or the UNM Course Catalog for information on UNM services and policies. Please see the UNM academic calendar for course dates, the last day to drop courses without penalty, and for financial disenrollment dates.

UNM RESOURCES

Learning Center

https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html

Form to request a tutoring Appointment

https://esurvey.unm.edu/opinio/s?s=131505

- UNM Libraries See Links on Class Learn Page
- <u>Student support and Services</u> See Link "Student Support and Services" on Class Learn Page

FOR MILITARY-CONNECTED STUDENTS

There are resources on campus designed to help you succeed. You can approach any faculty or staff for help with any issues you may encounter. Many faculty and staff have completed the GREEN ZONE training to learn about the unique challenges facing military-connected students. If you feel that you need help beyond what faculty and/or staff can give you, please reach out to the Veterans Resource Center on main campus at 505-277-3181, or by email at vrc@unm.edu. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

SEMESTER DEADLINES

Spring 2021 – 16-week classes (deadlines will be different for first and second 8-week classes)

- Monday, January 18: First day of class and Dr. Martin Luther King Day
- Friday, January 29, by 5:00 PM: Last day to add a class or to change Sections
- Friday, February 5: Last day to drop without "W" grade and with 100% refund

Tuition and fees for courses dropped after the above deadlines will Not be refundable

- Friday February 12: Last Day to Change Grading Options
- March 14 20: Spring Break
- Friday April 16: Last Day to Withdraw Without Student Services Permissions
- Friday May 7. Last Day to Withdraw With Student Services Permission
- Saturday May 8: Last day of instruction
- May 10 15: Finals Week

COURSE OUTLINE: Please check your UNM email for your login credentials. Once logged in to https://academy.oracle.com/en/oa-sign-in.html, please note in DP_x_y, x is the section and y is the lesson as shown in Week 1. Please note that this course outline is subject to change. If changes occur you will be notified. Please always check your email.

Week 1 / January 18

Introduction / Section 0

 Look over the Course Map, Oracle Flix's ERD, Rubric, and Tables

Introduction / Section 1

- Read Section 1 Student Lesson 1 or referred to as DP 1 1
- Read Section 1 Student Lesson 2 or referred to as DP 1 2
- Read Section 1 Student Lesson 3 or referred to as DP 1 3
- Attempt Section 1 Student Lesson 2 Practice or DP 1 3
- Review of how to use APEX
- TAKE SECTION 1 QUIZ

Week 2 / January 25

SELECT and WHERE / Section 2

- Read DP 2 1
- Read DP 2 2
- Read DP 2 3
- Attempt DP 2 3 Practice.doc
- TAKE SECTION 2 QUIZ

Week 3 / February 1

WHERE, ORDER BY, and Intro to Functions / Section 3

- Read DP 3 1
- Read DP_3_2
- Read DP 3 3
- Attempt DP 3 3 Practice.docx
- Demonstrate with APEX
- TAKE SECTION 3 QUIZ

Week 4 / February 8

Single Row Functions Part 1 / Section 4

- Read DP 4 1
- Read DP 4 2
- Read DP 4 3
- Review DP 2 4 1 Project.docx and DP 2 4 2 Project.docx
- Demonstrate with APEX
- TAKE SECTION 4 QUIZ

Week 5 / February 15

Single Row Functions Part 2 / Section 5

- Read DP 5 1
- Read DP 5 2
- Attempt DP 5 2 Practice.docx
- Read DP 5 3
- Attempt DP 5 3 Practice.docx
- Demonstrate with APEX
- TAKE SECTION 5 QUIZ

Week 6 / February 22

JOINs Part 1 / Section 6

- Read DP 6 1
- Read DP_6_2
- Read DP 6 3
- Read DP 6 4
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 6 Quiz

Week 7 / March 1

JOINs Part 2 / Section 7

- Read DP_7_1
- Read DP 7 2
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 7 Quiz

Week 8 / March 8

Group Functions Part 1 / Section 8

- Read DP_8_1
- Read DP_8_2
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 8 Quiz

Week 9 / March 15

MIDTERM REVIEW and EXAM (You may take it Week 8 or Week 10)

Week 10 / March 22

Group Functions Part 2 / Section 9

- Read DP 9 1
- Read DP_9_2
- Read DP 9 3
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 9 Quiz

Week 11 / March 29

Subqueries / Section 9 and Ensuring Quality / Section 10

- Read DP 9 1
- Read DP_9_2
- Read DP 9 3
- Read DP_10_1
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 10 Quiz
- TAKE SECTION 11 Quiz
- Start discussing final project

Week 12 / April 5

DML / Section 12 and DDL / Section 13

- Read DP 12 1
- Read DP 12 2
- Read DP 12 3
- Read DP 13 1
- Read DP 13 2
- Read DP 13-3
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 12 Quiz
- TAKE SECTION 13 Quiz
- Discuss final project

Week 13 / April 12

Constraints / Section 14 and Views / Section 15

- Read DP 14 and DP 15
- Attempt assigned Practice.docx's
- Demonstrate with APEX
- TAKE SECTION 14 Quiz
- TAKE SECTION 15 Quiz
- Discuss final project

Week 14 / April 19

Constraints / Section 16 and Views / Section 17

- Read DP 16 and DP 17
- Attempt assigned Practice.docx's
- TAKE SECTION 16 Quiz
- TAKE SECTION 17 Quiz

Week 15 / April 26

Constraints / Section 18

- Read DP_18
- Attempt assigned Practice.docx's
- TAKE SECTION 18 Quiz

Week 16 / May 3

Final Review / Project

Week 17 / May 10

Online Course Final