# IT 122: Intro to Database Management



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Office/Office: MTWTF 11:00 AM - 1:00 PM

ARR (through phone or Zoom) Course Credit hours: 4

#### COURSE DESCRIPTION

This online course is an introduction to DBMS through the Oracle Academy

#### **Course Goals:**

This course is for those who wish to learn the techniques and tools to design, build and extract information from a database. Also, novice programmers, as well as those at advanced levels will learn the basics of the SQL programming language.

# **Student Learning Outcomes/Course Objectives**

See IT122 Course Objectives.pdf in Learn

#### **Prerequisites and Co-requisites**

CS 150 (Suggested)

# **Specific Course Requirements**

Computer and Internet connection

### **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 Online Student Documentation ). 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
- 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.
- 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 supported browser on a desktop.
- Microsoft Office products are available free for all UNM students (more information on the UNM IT Software Distribution and Downloads page)
- 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
- For Oracle Academy help contact your instructor

### TEXTBOOK AND SUPPLEMENTAL MATERIALS

### **Required Textbooks and References:**

For a textbook your instructor will create an account for you on:

https://ilearning.oracle.com/ilearn/en/learner/jsp/login.jsp?site=OracleAcad

This site contains all relevant materials for the class

# **Supplementary Materials:**

There are a wide variety of database skill sets. Once you have a basic understanding of Oracle's basic concepts I would be happy to recommend other materials.

# **Required Supplementary Materials:**

USB Flash Drive (at least 16G)

## **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**

 Tests, labs, and quizzes are posted for completion on the Oracle site and need to be taken online. If you have difficulty using the Oracle site to compete work, notify me. For most assignments you will have 1 week to complete. If you cannot complete, notify me for options

#### **Course Schedule**

There will be one to two recorded lectures per week. Each lecture will have a phrase (ex. "hot dog"). 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 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

# **Submitting Assignments**

When you submit an assignment via the Oracle Academy site, I will check for its submission

# **Grading Scale**

Lecture Attendance	10%	A 90 +
Oracle Quizzes	30%	B 80 - 89
Oracle Practice	10%	C 70 - 79
Oracle Projects	10%	D 60 - 69
SQL	10%	F < 60
Final	30%	
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 <u>Office of Equal Opportunity</u>.

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.

# **Accessibility Statements**

<u>Blackboard's Accessibility statement</u> Microsoft's Accessibility statement

Include links to accessibility statements for all other technologies included in the course.

# **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:**

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**

- UNM Valencia Campus Tutoring Services
- UNM Main Campus CAPS Tutoring Services
- UNM-Valencia Library
- UNM Libraries
- "Life" Resources available to UNM-Valencia Students
- Student Health & Counseling (SHAC) Online Services

#### 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 <a href="mailto:vrc@unm.edu">vrc@unm.edu</a>. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

#### SEMESTER DEADLINES

# Fall 2020 – 16-week classes (deadlines will be different for first and second 8-week classes)

- Monday, August 17: First day of class, classes available in Blackboard Learn
- Friday, August 28, by 5:00 PM: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, September 4: Last day to drop without "W" grade and with 100% refund on LoboWEB
- Monday, September 7: LABOR DAY HOLIDAY
- Wednesday, October 7: FALL BREAK
- Tuesday, November 3: Election Day, no classes
- Friday, November 6: Last day to drop *without* Dean's permission on LoboWEB. Will receive "W" grade and will be responsible for tuition for the course.
- November 26-29: THANKSGIVING BREAK
- November 30 December 4: All classes will convert to remote instruction if not already remote
- Friday, December 4: Last day to add sections and/or change credit hours with form, last day to drop *with* Dean's permission. Will receive "W" grade and will be responsible for tuition for the course.
- December 7-12: Finals week. All final exams given remotely.

# COURSE OUTLINE (Please note that this course outline is subject to change. If changes occur, you will be notified)

### Week 1 / August 17

#### Section 0 and Section 1

- In Section 0 review Course Information, Learner Resources, Course Objectives, and Course Map
- Read Section 1 Lesson 1
- Read Section 1 Lesson 2
- Review Section 1 Lesson 2 Practice

# Week 2 / August 24

#### Section 1

- Read Section 1 Lesson 3
- Review Section 1 Lesson 3 Practice
- Read Section 1 Lesson 4
- Review Section 1 Lesson 4 Practice
- Attempt Section 1 Lesson 4 Project

# Week 3 / August 31

#### Section 2

- TAKE SECTION 1 QUIZ
- Read Section 2 Lesson 1
- Review Section 2 Lesson 1 Practice
- Read Section 2 Lesson 2
- Review Section 2 Lesson 2 Practice

### Week 4 / September 7

#### Section 2

- Read Section 2 Lesson 3
- Review Section 2 Lesson 3 Practice
- Attempt Section 2 Lesson 3 Project
- Read Section 2 Lesson 4
- Review Section 2 Lesson 4 Practice
- Attempt Section 2 Lesson 4 Project

# Week 5 / September 14

### Section 2

- Read Section 2 Lesson 5
- Review Section 2 Lesson 5 Practice
- Attempt Section 2 Lesson 5 Project
- Read Section 2 Lesson 6
- Review Section 2 Lesson 6 Practice
- Attempt Section 2 Lesson 6 Project

# Week 6 / September 21

#### Section 3

- TAKE SECTION 2 QUIZ
- Read Section 3 Lesson 1
- Review Section 3 Lesson 1 Practice
- Attempt Section 3 Lesson 1 First two Project files
- Read Section 3 Lesson 2

# Week 7 / September 28

### Section 3

- Review Section 3 Lesson 2 Practice
- Read Section 3 Lesson 3
- Review Section 3 Lesson 3 Practice

### Week 8 / October 5

#### Section 3

- Data Modeling Terminology and Mapping
- TAKE SECTION 3 QUIZ
- Review for Midterm

### Week 9 / October 12

#### Midterm

- More review for Midterm
- Midterm

# Week 10 / October 19

#### Section 6

- Introduction to Oracle's APEX
- Uploading data into APEX
- Read Section 6 Lesson 2
- Intro to SQL using APEX

### Week 11 / October 26

#### Section 6

- SQL review / Commands
- Section 6 Lesson 2 Practice
- Read Section 6 Lesson 3

### Week 12 / November 2

#### Section 6

- SQL review / Commands
- Review Section 6 Lesson 3 Practice
- Attempt Section 6 Lesson 3 Project
- Read Section 6 Lesson 4

#### Week 13 / November 9

#### Section 6

- Quiz
- SQL review / Commands
- Transaction Control Language (TCL)
- SQL commands

#### Week 14 / November 16

#### Section 6

- SQL review / Commands
- SQL worksheet
- Quiz

# Week 15 / November 23

#### Section 4

- Oracle's SQL Developer Data Model
- Converting to Logical Model to a Relation al Model

# Week 16 / November 30

# Section 5

• Mapping to to the Physical Model

Week 16 / December 7 -12

• FINAL with Hands On Skills Exam