DDA400 — Database Design & Administration, 3.0 hours

PROFESSOR

Walker Byrd

While pursuing a Master's Degree in Information Technology from Grantham University, I developed skills in reverse engineering, computer forensics, networking, training and information security. This knowledge has enabled me to operate in Windows and Linux platforms and master multiple security principles virtual and physical.

During my 28 years in the Military as a Signal Warrant Officer I have had several opportunities to act in an instructor role; both face to face and virtual. I have been trained as an instructor by both the U.S. Army and the Royal Danish Defense College in Copenhagen, Denmark. I take teaching to heart in all cases.

CONTACT INFORMATION

E-mail: wbyrd@lakewood.edu Cell Phone: 800-517-0857 X 787

ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

All members of the Lakewood University community who use the University's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing info@lakewood.edu

BOOKS AND RESOURCES

Coronel, Carlos, and Steven Morris. Database Systems: Design, Implementation, & Management. (14th Edition). Cengage Learning US, 2022.

EVALUATION METHOD

Graded work will receive a numeric score reflecting the quality of performance. Course Requirement Summary

- Assignments Total of 60 Points
- Weekly discussion forums-Total of 80 Points
- Final Exam 50 Points

GRADING SCALE

Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 190. To determine the final grade, the student's earned points are divided by 190.

Your overall course grade will be determined according to the following scale:

A = (90% -100%) B = (80% - 89%)

C = (70% - 79%)

D = (60% - 69%)

F < (Below 60%)

ACADEMIC INTEGRITY/ PLAGIARISM:

Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

DISABILITY ACCOMMODATIONS

Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: disabilityservices@lakewood.edu

SUPPLEMENTAL TEXTS

You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: https://owl.purdue.edu/owl/research and ctrustion/apa style/apa formatting and style/apa formatting a formatting a formatting a formatting a formatt

LIBRARY

Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at modell@lakewood.edu or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020

She can assist you with navigating LIRN, research, citations etc.

SUPPORT

Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2 info@lakewood.edu studentservices@lakewood.edu

CAREER SERVICES

Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2 careerservices@lakewood.edu

IESSONS

TITLE Lesson #1	 Database Systems Data Models F C 	READINGS/ASSIGNMENTS Study Course Syllabus Read Chapters 1 & 2 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation	DUE Assignment 1 upon completion of the lesson	OBJECTIVES Objective 1
 The Relational Database Model Entity Relationship (ER) Modeling 	Read Chapters 3 & 4 Participate in the Discussion Forum Lesson Evaluation	Objective 2		
TITLE Lesson #3	COURSE TOPIC	READINGS/ASSIGNMENTS	OBJECTIVES Objective 3	
	 Advanced Data Modeling Normalization of Database Tables 	Read Chapters 5 & 6 Participate in the Discussion Forum Lesson Evaluation	objective 3	
TITLE Lesson #4	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES Objective 4
	 Introduction to Structured Query Language (SQL) Advanced SQL 	Read Chapters 7 & 8 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 4

TITLE Lesson #5 **COURSE TOPIC**

READINGS/ASSIGNMENTS

OBJECTIVES

Objective 5

Database Design

Transaction Management and Concurrency Control

Read Chapters 9 & 11 Participate in the Discussion Forum **Lesson Evaluation**

Read Chapters 11 & 12

TITLE Lesson #6 **COURSE TOPIC**

READINGS/ASSIGNMENTS

OBIECTIVES

Database Performance **Tuning and Query** Optimization

Participate in the Discussion Forum **Lesson Evaluation Distributed Database**

Objective 6

Management Systems

TITLE **COURSE TOPIC**

READINGS/ASSIGNMENTS

OBJECTIVES Objective 7

Business Intelligence and Data Warehouses

Big Data and NoSQL

Read Chapters 13 & 14 Participate in the Discussion Forum Lesson Evaluation

TITLE Lesson #8

Lesson #7

COURSE TOPIC

READINGS/ASSIGNMENTS

DUE

OBJECTIVES

Objective 1

Database Connectivity and Web Technologies

Database Administration and Security

Read Chapter 15 & 16 Participate in the Discussion Forum **Complete Assignment 3** Complete the Final Exam Request the Next Course LessonEvaluation THANKS FOR A GREAT CLASS

Assignment 3 and Final exam upon completion of the lesson

DESCRIPTION

Upon completion of this course students will be able to improve business performance and bring efficiency through the development of credible databases. Students will learn to strategically develop appropriate architecture and design while performing data modeling, data warehousing using the updated tools and technologies.

Program Objectives

- 1. Students will learn the importance of database systems and data models.
- 2. Students will gain an understanding in Relationship (ER) Modeling.
- 3. Students will learn how to demonstrate skills in advanced data modeling, and normalization of database tables.
- 4. Student will learn the Introduction to Structured Query Language (SQL), Advanced SQL, and Database Design.
- Students will show mastery in transaction management and concurrency control, and database performance tuning and query optimization.
- Students will learn the importance of Distributed Database Management Systems, Business Intelligence, and Data
- Students will gain the knowledge and understanding of Big Data and NoSQL, and Database Connectivity and Web Technologies.
- Students will demonstrate mastery in Database Administration and Security.

OBJECTIVES

- 1. Students will learn the importance of database systems and data models.
- Students will gain understanding in Relationship (ER) Modeling.
- 3. Students will learn how to demonstrate skills in advanced data modeling, and normalization of database tables.
- Student will learn the Introduction to Structured Query Language (SQL), Advanced SQL, and Database Design.
- Students will show mastery in transaction management and concurrency control, and database performance tuning and query optimization.

- 6. Students will learn the importance of Distributed Database Management Systems, Business Intelligence, and Data Warehouses.
- 7. Students will gain the knowledge and understanding of Big Data and NoSQL, and Database Connectivity and Web Technologies.
- 8. Students will demonstrate mastery in Database Administration and Security.