



# ADVANCED DATABASE MANAGEMENT

## ADM300 — Advanced Database Management, 3.0 hours

### PROFESSOR

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Tom Tardy is an Information Security professional passionate about teaching and helping others perform at their best. Tom loves to learn and challenge himself. He has a master's degree in Information Security, two bachelors' degree - in Education and Computer Forensics - and an associate degree in Law Enforcement Technology. He also is a Certified Ethical Hacker (C|EH) and Certified Hacker Forensic Investigator (C|HFI).

### CONTACT INFORMATION

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E-mail: [ttardy@lakewood.edu](mailto:ttardy@lakewood.edu)  
Cell Phone: 800-517-0857 X 786

### ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

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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](mailto:info@lakewood.edu)

### BOOKS AND RESOURCES

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Friedrichsen, Lisa, et al. Concepts of Database Management. 10th Edition. Cengage Learning US, 2023.

### EVALUATION METHOD

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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

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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:

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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

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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](mailto:disabilityservices@lakewood.edu)

## SUPPLEMENTAL TEXTS

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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](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\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/general\\_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)

## LIBRARY

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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](mailto: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

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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

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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

## LESSONS

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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none"><li>Introduction to Database Management</li><li>The Relational Model 1: Introduction, QBE, and Relational Algebra</li></ul>	Study Course Syllabus Read Chapters 1 & 2 Participate in the Discussion Forum Lesson Evaluation		Objective 1
Lesson #2	<ul style="list-style-type: none"><li>The Relational Model 2: SQL</li></ul>	Read Chapter 3 Complete Assignment 1 Lesson Evaluation	Assignment 1 upon completion of the lesson	Objective 2
Lesson #3	<ul style="list-style-type: none"><li>The Relational Model 3: Advanced Topics</li></ul>	Read Chapter 4 Participate in the Discussion Forum Lesson Evaluation		Objective 3
Lesson #4	<ul style="list-style-type: none"><li>Database Design 1: Normalization</li></ul>	Read Chapter 5 Participate in the Discussion Forum Lesson Evaluation		Objective 4
Lesson #5				Objective 5

- Database Design 2: Design Method
- Read Chapter 6  
Participate in the Discussion Forum  
Lesson Evaluation

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #6	<ul style="list-style-type: none"> <li>• DBMS Functions</li> </ul>	Read Chapter 7 Complete Assignment 2 Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 6

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #7	<ul style="list-style-type: none"> <li>• Database Administration</li> </ul>	Read Chapter 8 Participate in 2 Discussion Forums Lesson Evaluation		Objective 7

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #8	<ul style="list-style-type: none"> <li>• Database Management Approaches</li> </ul>	Read Chapter 9 Participate in 2 Discussion Forums Complete Assignment 3 Complete the Final Exam Request the Next Course Lesson Evaluation	Final exam upon completion of the lesson  Assignment 3 upon completion of the lesson	Objective 8

## DESCRIPTION

This course will provide students with an advanced understanding of what they learned about SQL in the fundamental course and introduce different advanced topics, including query optimization, concurrency, data warehouses, object-oriented extensions, and XML.

### Program Objectives

1. Describe the relational model.
2. Apply built-in SQL functions.
3. Explain the use of stored procedures, triggers, and data macros.
4. Discuss functional dependence and primary keys.
5. Discuss the general process and goals of database design.
6. Describe the security services provided by DBMS.
7. Explain the DBA's responsibilities in formulating and enforcing database policies for access privileges, security, disaster planning and archiving.
8. Examine the ways databases are accessed on the web.

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