<u>AMBERTON UNIVERSITY</u> e-COURSE SYLLABUS

MGT6790.E1 Database Management Fall 2025

PROFESSOR INFORMATION:

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COURSE INFORMATION:

MGT6790.E1 Database Management

Level: Graduate

Beginning Date of Session: Saturday, September 13, 2025 Ending Date of Session: Thursday, November 20, 2025

Student access available to the Student Portal: Saturday, September 13, 2025.

Students enrolled in distance learning courses are not assessed any additional fees for security or identity verification.

COURSE PREREQUISITES:

None

TEXTBOOK(S) AND REQUIRED MATERIALS:

Title: Database Systems: Design, Implementation, and Management

Author: Carlos Coronel, Steven Morris

Publisher: Cengage Learning

Year Published: 2023

Edition: 14th

ISBN: 13: 9780357673119

Price: Available at http://amberton.ecampus.com

Amberton University has an agreement with eCampus.com to provide a full-service online bookstore to students. The Amberton University Virtual Bookstore is accessible through the University's website, www.Amberton.edu. There is also a bookstore link in the Student Portal.

The AU Virtual Bookstore provides an easy to use interface, online buyback of books, and same day shipment of most titles with an average delivery time of 2-3 days depending on the student's location. Textbook options include new, used, rental, and electronic media as available.

Since no books are sold on campus, students should plan accordingly and purchase their books in advance of the first day of class, allowing time for shipping. Be certain <u>you are enrolled</u> in the course before purchasing your book(s). All textbook information (Title, Author, ISBN, etc.) is available in the course syllabi so students can shop competitively. Most textbooks can be purchased from many different textbook vendors. Some textbooks may only be available on the University's Virtual Bookstore. Students should be careful to obtain the exact resource(s) required for the course.

APA Requirement

APA (American Psychological Association) style is most commonly used to cite sources within the social sciences. This resource, revised according to the 7th edition, offers examples for the general format of APA research papers, in-text citations, endnotes/footnotes, and the reference page. For more information, please consult the Publication Manual of the American Psychological Association, (7th ed.). All coursework at Amberton University will comply with the standards contained in the APA Publication Manual.

COURSE COMPETENCIES:

This course introduces essential principles of applied database management to support organizational and administrative functions. Key topics include database management systems (DBMS) concepts, data models, data manipulation, and core aspects of DBMS security, integrity, recovery, and concurrency. Emphasis is placed on effective database design principles and practices. These concepts are reinforced through hands-on projects focused on building, populating, and querying databases.

UPON COMPLETION OF THE COURSE, THE STUDENT WILL BE COMPETENT IN:

- Analyzing data concepts within a database management system (DBMS) environment.
- 2. Comparing and contrasting various types of database management systems (DBMS).
- 3. Examining all stages of the database development process, from planning through deployment.
- 4. Explaining the unique requirements and considerations of different database environments, including security, scalability, and performance.
- 5. Applying modern database management principles to develop and implement a database system using appropriate technology.
- 6. Demonstrating competence in advanced database functions by implementing key database management principles to solve real-world problems.
- 7. Illustrating the application of key database concepts within different database systems and environments.
- 8. Comparing and contrasting popular database management systems, focusing on their use cases and distinctive functionalities.
- 9. Exploring the connection between databases and data analytics, including how database structures support data-driven insights.
- 10. Evaluating Artificial Intelligence (AI) tools and techniques for enhancing data processing, optimization, and decision-making capabilities within database management systems.
- 11. Analyzing normalization techniques to optimize database design, ensuring efficiency, data integrity, and minimal redundancy.
- 12. Refining SQL queries to extract, update, and manage data efficiently while ensuring performance optimization.
- 13. Examining methods for connecting databases to front-end applications, APIs, and cloud-based solutions to support modern business needs.
- 14. Analyzing key legal, ethical, and regulatory considerations related to data privacy, protection, and compliance in database environments.
- 15. Assessing strategies for ensuring data availability, backup, disaster recovery, and business continuity planning in database management.

Acquired Skills:

- 1. SQL
- 2. MySQL
- 3. Microsoft Access
- 4. MongoDB
- 5. Tableau Public

COURSE POLICIES:

(All coursework must be completed and submitted by the assigned due dates for each unit. For discussion activities, your initial post is due by Thursday at 11:55 PM (CDT) for the assigned week. You must also reply to at least two classmates by the following Monday at 11:55 PM (CDT). All other assignments are due by 11:55 PM (CDT) on their specified due dates, except during the final week of the course. During that week, all assignments are due by Tuesday, 11/18/2025, at 11:55 PM (CDT). To ensure fairness and maintain a high standard of feedback for all students, late assignments will not be accepted unless there is a documented emergency. Additionally, extra credit will not be offered in this course. Please plan ahead to stay on track and meet all deadlines.)

Student's Responsibilities

This syllabus contains information, policies, and procedures for a specific course. By enrolling, the student agrees to read, understand, and abide by the policies, rules, regulations, and ethical standards of Amberton University as contained in the current university catalog and schedule of classes.

Attendance Policy:

Regular and punctual class attendance and engagement is expected at Amberton University. In case of an absence, it is the student's responsibility to contact the professor as soon as possible. If a student intends on withdrawing from a course, it is the student's responsibility to follow the university's policy on formally withdrawing from a course. **Ceasing to attend classes does not constitute an official withdrawal.**

Attendance in a lecture course is defined as punctual arrival to, and engagement in, a full lecture session. A Student in a lecture course missing more than 20% (two class periods for weekday classes or one class period for Saturday classes) of the class meetings may be assigned a grade of an "F" or withdrawn at the discretion of Amberton University.

Attendance in a distance learning course is defined as active participation in the weekly online class sessions. "Active participation" can be defined as: submitting an academic assignment, taking an exam, engaging in an interactive tutorial, participating in an online discussion forum (or chat session), or initiating (or responding to) a communication with a faculty member about an academic assignment or the subject matter of the course. A student not meeting these requirements may be assigned a grade of an "F" or withdrawn at the discretion of Amberton University.

Plagiarism Policy

Plagiarism is the presentation of someone else's work as though it were your own. If you use another person's words, ideas, or information; or if you use material from an outside source – whether a book, magazine, newspaper, business publication, broadcast, speech, or electronic media – you must acknowledge that source. Plagiarism is a violation of the University's code of student ethical conduct and is one that is taken seriously. Amberton University operates on an honor system; therefore, honesty and integrity are essential characteristics of all who are associated with the institution. All Amberton students are expected to abide by the honor system and maintain academic integrity in all their work. Amberton University and its instructors monitor student work for plagiarism and reserve the right to submit such work to technology-based plagiarism detection services and applications at any time.

Self-plagiarism means reusing work that you have already published or submitted for a class. It can involve:

- Resubmitting an entire paper
- Copying or paraphrasing passages from your previous work

Self-plagiarism misleads your readers by presenting previous work as completely new and original. Students may not submit the same paper in substance in two or more classes without prior written permission of the instructors involved.

Amberton University students who use Artificial Intelligence (AI) generated content must adhere to the following policies:

Originality: Students must avoid presenting AI generated content as their own original work. It is essential to acknowledge the involvement of AI in the content creation process in order to maintain academic and ethical standards.

Paraphrasing: When using Al generated content, students must rephrase and/or modify the generated text. Paraphrased Al generated content should also be properly cited.

Acknowledgement: When using AI generated content in any assignment, proper credit must be given to the AI system that generated the content. https://apastyle.apa.org/blog/how-to-cite-chatgpt

Students agree that by taking this course, all required assignments may be subject to submission for a textual similarity review to Turnitin.com for the detection of plagiarism and self-plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting

plagiarism in future papers. Use of Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com website.

Turnitin is a writing improvement and plagiarism prevention tool which uses special algorithms, to compare text-based student submissions to the Turnitin database and other online sources. Turnitin produces a detailed **similarity report** that can be customized and viewed by instructors and students.

Turnitin "Draft Coach" is a Google based add-on to Turnitin which supports students in developing high-quality academic writing; and serves as an integrity coach. Draft Coach helps address errors and improve the quality of student's writing by highlighting grammar mistakes, identifying incorrectly cited sources, and scanning for similarity across several databases. By providing formative feedback on how to address citation issues, incorrect grammar, and matches with the Turnitin database, Draft Coach provides explanations to help students become more confident writers, capable of producing higher quality work both in academics and in the workplace.

COURSE OUTLINE AND CALENDAR:

This course will utilize the following instruments to determine student grades and proficiency of the course learning outcomes. The classroom activities will include textbook and article reading, videos, discussions, homework, and a course paper. These activities are designed to help students acquire knowledge, apply learning concepts, and master course content.

Week	Topic	Assignment	Competencies Covered	Due Date
1 9/13 – 9/22	Chapter 01: Database Systems	Discussion 1a & 1b Chapter 01 Assignment	LO 1-15	Discussion 1a & 1b: Initial Post Due Thursday, 9/18 by 11:55 PM.
		Chapter 01 Quiz		Reply posts to two classmates due Monday, 9/22 by 11:55 PM. Chapter 01 Assignment and Quiz Due 9/22 by
2 9/22 – 9/29	Chapter 02: Data Models	Discussion 2 Chapter 02 Assignment Chapter 02 Quiz Start Data Camp Activity 1	LO 1-15	Discussion 2: Initial Post Due Thursday, 9/25 by 11:55 PM Reply posts to two classmates due Monday, 9/29 by 11:55 PM. Chapter 02 Assignment and Quiz Due 9/29 by 11:55 PM.

3	Chapter 03:	Discussion 3	LO 1-15	Discussion 3: Initial
_	· ·	Discussion 3	LO 1-15	
9/29 – 10/6	The Relational			Post Due Thursday,
	Database Model	Chapter 03		10/2 by 11:55 PM
		Assignment		
				Reply posts to two
		Chapter 03 Quiz		classmates due
				Monday, 10/6 by
		Continue working		11:55 PM.
		on Data Camp		
		Activity 1		Chapter 03
				Assignment and
				Quiz Due 10/6 by
				11:55 PM.
4	Chapter 04:	Discussion 4	LO 1-15	Discussion 4: Initial
10/6 – 10/13	Entity Relationship	DISCUSSION 4	LO 1-13	
10/6 - 10/13		Ob auton 04		Post Due Thursday,
	(ER) Modeling	Chapter 04		10/9 by 11:55 PM
		Assignment		
				Reply posts to two
		Chapter 04 Quiz		classmates due
				Monday, 10/13 by
		Submit Data Camp		11:55 PM
		Activity 1		
				Chapter 04
				Assignment and
				Quiz Due 10/13 by
				11:55 PM.
				Data Camp Activity
				1 Due 10/13 by
				11:55 PM
	Objection OC:	Diagnasian 5	10115	
5	Chapter 06:	Discussion 5	LO 1-15	Discussion 5: Initial
10/13 – 10/20	Normalization of			Post Due Thursday,
	Database Tables	Chapter 06		10/16 by 11:55 PM
		Assignment		
	Appendix M: MS			Reply posts to two
	Access Tutorial	Chapter 06 Quiz		classmates due
				Monday, 10/20 by
		Start Research		11:55 PM
		Paper Annotated		
		Bibliography		Chapter 06
				Assignment and
				Quiz Due 10/20 by
				11:55 PM.

6 10/20 – 10/27	Chapter 07: Introduction to Structured Query Language (SQL)	Discussion 6 Chapter 07 Assignment Chapter 07 Quiz Submit Research Paper Annotated Bibliography	LO 1-15	Discussion 6: Initial Post Due Thursday, 10/23 by 11:55 PM Reply posts to two classmates due Monday, 10/27 by 11:55 PM Chapter 07 Assignment and Quiz Due 10/27 by 11:55 PM. Research Paper Annotated Bibliography Due Monday, 10/27 by 11:55 PM
7 10/27 – 11/3	Chapter 09: Database Design Appendix A: Designing Databases with Lucidchart: A Tutorial	Discussion 7 Chapter 09 Assignment Chapter 09 Quiz Start Data Camp Activity 2 Continue working on Research Paper	LO 1-15	Discussion 7: Initial Post Due Thursday, 10/30 by 11:55 PM Reply posts to two classmates due Monday, 11/3 by 11:55 PM Chapter 09 Assignment and Quiz Due 11/3 by 11:55 PM.

8 11/3 – 11/10	Chapter 14: Big Data and NoSQL Appendix P: Working with MongoDB Tableau Public	Discussion 8 Chapter 14 Assignment Chapter 14 Quiz Continue working on Research Paper Submit Data Camp Activity 2	LO 1-15	Discussion 8: Initial Post Due Thursday, 11/6 by 11:55 PM Reply posts to two classmates due Monday, 11/10 by 11:55 PM Chapter 14 Assignment and Quiz Due 11/10 by 11:55 PM. Submit Data Camp Activity 2 Due 11/10 by 11:55 PM
9 11/10 – 11/17	Chapter 16: Database Administration and Security Appendix F: Client/Server Systems Appendix N: Creating a New Database using Oracle Appendix O: Data Warehouse Implementation Factors	Discussion 9 Chapter 16 Assignment Chapter 16 Quiz Continue working on Research Paper	LO 1-15	Discussion 9: Initial Post Due Thursday, 11/13 by 11:55 PM Reply posts to two classmates due Monday, 11/17 by 11:55 PM Chapter 16 Assignment and Quiz Due 11/17 by 11:55 PM.
10 11/17 – 11/20	Course Wrap Up	Discussion 10 Research Paper	LO 1-15	Discussion 10: Initial Post Due Tuesday, 11/18 by 11:55 PM Reply posts are optional Research Paper Due Tuesday, 11/18 by 11:55 PM.

GRADING CRITERIA:

There are five types of learning activities in this class:

Discussion – This course will utilize weekly discussions to enhance students' research and communication skills as well as demonstrate an understanding and application of concepts. See the discussion activities for instructions, requirements, and the evaluation rubric.

Assignments – There are nine homework assignments. Problems may be a combination of short answers, and computational activities. Homework assignments are designed to reinforce course materials and ensure understanding and application of concepts.

Quizzes - There are nine chapter quizzes. Questions may be a combination of multiple choice, true/false, or short answers. Quizzes are designed to reinforce course materials and ensure understanding of concepts.

Data Camp Activities – There are two Data Camp activities designed to enhance an understanding of database management. Data Camp offers interactive, hands-on learning experiences through guided exercises and real-time feedback. These activities help develop practical skills while reinforcing key course concepts. A certificate of completion will be submitted for grading.

Course Paper – Students will be required to research and develop a written paper on an approved course topic. The paper will be written in APA 7e format. The content of the paper will not exceed five papers. A cover page, abstract and reference page(s) are required. These are not included in the content page count. NOTE: No formal data analysis is required for the course paper. See the Moodle Course Paper Module for more information.

Grading Criteria

Assignment Category	Assignment Details	Assignment Points	Percentage
Discussions	(10 @ 25 pts.)	250	25%
Assignments	(9 @ 40 pts.)	360	36%
Data Camp Activities	(2 @ 50 pts.)	100	10%
Annotated Bibliography	90 pts.	90	9%
Research Paper	200 pts.	200	20%

Graduate

92 – 100 A 82 – 91 B 72 – 81 C 62 – 71 D

Below 62 F

GRADE NOTIFICATION AND INSTRUCTOR FEEDBACK:

A successful distance learning experience requires a flow of communication between instructor and student throughout the session. Instructor comments are considered essential to the learning process. Therefore, each assignment/exam submitted will be reviewed, graded, and returned to the student in a timely manner along with the appropriate commentary. Students should carefully review all comments.

Final grades are processed approximately one week after the last day of the session and may be located in the My Grades section of the online registration portal as well as being emailed to the student's Amberton University email. Amberton University staff will not release grades over the phone. University instructors will not leave a message with comments or grades in any type of media that is not secure.

For questions regarding grades after the semester has ended, students should use their university email account and contact the instructor at the faculty email address as provided above in *Professor Information* area.

Incomplete Grades

An "I" (incomplete grade) is given at the discretion of the professor and may be given only when an emergency or illness prevents the student from completing course requirements. Should an "I" be granted, the student has 30 days from the end of the session to complete the conditions of the incomplete. An "I" which is not properly removed within 30 days following the session enrolled will become an "F" grade.

How To Withdraw From a Course

To be official, the class withdrawal must be in writing and signed by the student requesting the withdrawal; no withdrawal is accepted verbally. Please review the "Schedule of Classes" (online or in-print) for procedures for class changes or withdrawals and the refund policy and schedule.

COURSE DELIVERY METHODOLOGY:

This course is offered as a distance-learning course through the Moodle Learning Platform. Amberton's distance learning courses, called e-Courses, are identical to classroom courses in terms of learning outcomes, competencies, and instructor expectations. A student choosing to take an e-Course must have the following skills and technical capabilities:

- 1. Access to the Internet
- General knowledge in:
 Internet browser settings and configuration e-mail and file attachments
 Uploading and downloading files
 Using a word processing package
- 3. Ability to conduct on-line research

Students who have not mastered these skills should not enroll for this course but should consider enrolling in MIS2110 Computer Concepts and Internet Technologies for instruction in these areas.

HOW TO ACCESS YOUR COURSE:

Through the Amberton University Student Portal

Students enrolled in distance learning courses using the Moodle Learning Platform may access the course through the Amberton University Student Portal. The site may be accessed through the University's main page (http://www.Amberton.edu) or at http://apps.Amberton.edu. After selecting the "Student Portal" link, you will be prompted for a Username and Password.

Use your assigned username and password (AUID) as described below to enter the AU Student Portal:

Username = your capitalized firstname initial+lastname+last 3 digits of your SSN.

* Use your name exactly as it is listed on the University's records, including any suffixes or hyphenations, such as Jr, Sr, or II, as a part of your username.

For example: James Jones, Jr. SSN: 123-45-6789

Username: JJonesJr789

Password = your Amberton University ID# (AUID) including the dashes

For example: 04-999-999

Once your login has been validated, you may select from a variety of menu options, including your individual E-Course, email account, Remote Research, General Tools, all Syllabi and Research Tutorials.

If you are accessing the Student Portal from a public or shared computer, close the browser completely when finished, or click on the Logout button. For security purposes, no other person should have access to your Username or Password. If you feel your information has been compromised or if you experience technical difficulties, contact the e-course system administrator at: e-sysop@amberton.edu

If you have lost or do not know your Amberton ID#, please contact the Student Services Office 972/279-6511 or advisor@Amberton.edu for a replacement AUID card. You must know your Amberton ID# to gain access to the course and to send an email to your professor.

Through the Amberton University Moodle Website

Students enrolled in distance learning courses using the Moodle Learning Platform may also access the course by going to: http://moodle.Amberton.edu

For those utilizing Moodle for the first time, the <u>username and password</u> for the Moodle Learning Platform will be emailed to the student's University email account prior to the start of the course. For those returning to Moodle who do not remember their username and password, click on the link "Forgotten your username or password" available on the Moodle log in page (http://moodle.Amberton.edu). Otherwise use the same username and password as previous session.

Moodle Tutorial:

Upon successful log in and access to the Moodle learning platform, there is a *Student Moodle Tutorials* course available, to learn about the basics of Moodle. Simply click on the link for the *Student Moodle Tutorials* and read through the various learning topics: Navigating; Communicating; Assignments & Exams; Grades; and Student Resources.

COURSE COMMUNICATIONS:

Students will communicate with faculty through the Moodle Learning Platform or the Amberton University email system.

Email Communication

Each student enrolled is assigned an Amberton email account, which gives the student access to the Amberton email system (my.Amberton.edu). This email account is provided by Google Apps for Education. Students are encouraged to check their email regularly for University news, notices, and to communicate with instructors.

The student's assigned email address would be Username@my.Amberton.edu

Example: LJones-Smith789@my.Amberton.edu

The student Username is determined by:

firstname initial+lastname+last 3 digits of student ssn.

For example: Linda Jones-Smith SSN: 123-45-6789 Email Address = LJones-Smith789@my.Amberton.edu

Students will be prompted for a Username and Password when accessing their email account. Use the Username portion of the email address as the username (Example: LJones-Smith789) and your Amberton ID# (including the dashes) as the password.

If you already have a Google Gmail account, you might be prompted to add this account to your current account. Click 'Yes' and you will be logged into your my. Amberton. edu email account. It will be a separate email account from your personal Gmail account.

If you need assistance with your email account, please visit https://support.google.com/mail

Students are responsible for reviewing the "Communication Guidelines" provided on the individual E-Course for specific instructor requirements.

Upon completion of a session, all communication and course specific information is removed from the Moodle system. If a student needs to maintain a record of communications or assignments, the student is strongly encouraged to print out or download these items to a disk for their own records.

FORMAT AND SUBMISSION OF ASSIGNMENTS:

Assignments are to be submitted to the appropriate assignment Drop Box in the Moodle system. Specific directions and guidelines for submission of assignments are located on-line in the "Communication Guidelines" of the e-course. Due to compatibility issues, Office 2007 files cannot be read by earlier versions of Microsoft Office. Before submitting an exercise file, confirm the file is in the proper format for grading by the instructor.

INSTRUCTOR/COURSE EVALUATION:

Each session, all Amberton students are provided with the opportunity to evaluate their courses and instructors. The evaluation process is an important one and provides students with an anonymous and confidential way to give meaningful feedback to the University. Summary information and comments are provided to faculty after the close of the session. All information provided is anonymous.

The Instructor/Course Evaluation will be open for completion during week 9 of the session. An evaluation assignment will be placed in week 9 of the Moodle course, along with the instructions on how to complete the evaluation. Prior to week 9, the University will send out an email containing instructions and dates for the evaluation period.

RESEARCH RESOURCES:

The Library provides access to full-text, and peer reviewed articles, and digital research tools. Students can search Library holdings through the online catalog and databases search engines available on the Library website or browse the physical library space and holdings located at the Garland campus.

Research items not contained in the Amberton Library collection can be located through interlibrary Loan (ILL) or through the TexShare program with the help of the Library staff. Students with questions about available services, resources, or research, may contact the Library via email at Library@amberton.edu.

RESEARCH ACCESS:

Databases can only be accessed by authorized users, and students at Amberton must enter their Amberton ID credentials-same as Moodle login-to gain access when off-campus. Use an Amberton website, such as the University site (<u>Amberton.edu</u>) or the library site (<u>Library.amberton.edu</u>) to find links to databased and digital books. Online resources are available all day, every day.

Library Live Chat Feature

Library staff are available to assist students with research problems or questions during Library hours through a live online chat feature, telephone, email, "How-to" videos, or in person. The library telephone is (972-279-6511 ext. 185. You can email questions to library@amberton.edu or visit the library in person on the Garland campus for assistance.

Microsoft Office 365 Education:

Amberton University students have access to a license for Office 365 Education, a comprehensive suite of productivity tools. This package includes:

- Microsoft Word for document creation
- Excel for spreadsheets and data analysis
- PowerPoint for presentations
- OneNote for digital note-taking
- Microsoft Teams for collaboration

Additional classroom tools to enhance your learning experience

To set up your student account and access these resources, please follow the instructions provided in our step-by-step guide: https://amberton.edu/wp-content/uploads/2025/01/Office365 Setup Students.pdf

Google Workspace for Education:

All students are assigned a Gmail account in Google Workspace for Education.

To set up your student account and access these resources, please follow the instructions provided in our step-by-step guide: https://amberton.edu/wp-content/uploads/2025/01/Google_Drive_Students.pdf

Once logged into your student account, you'll have access to a suite of tools designed to enhance your learning experience:

- Google Docs: Create and edit essays, reports, and other written assignments
- Google Slides: Develop engaging presentations for projects and class discussions
- Google Sheets: Perform data analysis, create charts, and manage calculations
- Google Drive: Store, organize, and easily access all your files in the cloud
- Google Calendar: Schedule study sessions, track assignment deadlines, and manage your academic timetable
- Google Keep: Take and organize quick notes during lectures or study sessions
- Google Meet: Attend virtual classes, participate in group study sessions, or meet with teachers
- Google Classroom: Access course materials, submit assignments, and receive feedback from instructors
- Google Forms: Create surveys for research projects or participate in class guizzes
- Google Sites: Build websites or digital portfolios to showcase your work