**COURSE SYLLABUS**

**COLLEGE OF BUSINESS**

**SUMMER SEMESTER, 2017**

**CIS 645-I03**

**DATABASE MANAGEMENT SYSTEMS**

**INSTRUCTOR:** Jason Watson, Ph.D.**,** Assistant Professor

Department of Computer

Science and Information Systems

**OFFICE HOURS:** Mon-Thurs: 9:00 am – 11:00 am (Online Only)

Other times by appointment

**OFFICE LOCATION:** Keller Hall #248

**OFFICE TELEPHONE:** 256-765-4689 (please leave message)

**E-MAIL:** Canvas CIS 645-I03 Course Inbox (preferred)

UNA Portal: jwatson5@una.edu

**FAX:** 256-765-4811 (CSIS Department Office)

**CLASS LOCATION:** Online

**COURSE TIME:** Online

COURSE DESCRIPTION: An intensive examination of organizational databases, including data validity, reliability, security, and privacy. Generating reports using structured query languages is emphasized. Distributed databases, data mining, and data warehousing are introduced. The roles of database administrator and data administrator will be explored including understanding data integrity and security. A current enterprise DBMS will be used.

**SECTION NUMBER:** I03

**CREDIT HOURS:** 3

**PREREQUISITE:** CIS 625 or equivalent

**COURSE DELIVERY METHOD:** Online

**COURSE OBJECTIVES:**

The student will be able to:

1. Understand and use data modeling concepts and techniques (CoB Goal 1)
2. Develop and manage databases using modern DBMS tools (CoB Goal 2)
3. Address data management and ethical issues involving security and data integrity (CoB Goal 3)
4. Use the proper tools and techniques to manage business intelligence and improve decision making (CoB Goal 2)

**TOPICS COVERED:**

Part I: Database Concepts

Chapter 1: Database Systems

Chapter 2: Data Models

Part II: Design Concepts

Chapter 3: The Relational Database Model

Chapter 4: Entity Relationship (ER) Modeling

Chapter 5: Advanced Data Modeling

Chapter 6: Normalization of Database Tables

Part III: Advanced Design and Implementation

Chapter 7: Introduction to Structured Query Language (SQL)

Chapter 8: Advanced SQL

Chapter 9: Database Design

Part IV: Advanced Database Concepts

Chapter 10: Transaction Management and Concurrency Control

Chapter 11: Database Performance Tuning and Query Optimization

Chapter 12: Distributed Database Management Systems

Chapter 13: Business Intelligence and Data Warehouses

Chapter 14: Big Data Analytics and NoSQL

Part V: Databases and the Internet

Chapter 15: Database Connectivity and Web Technologies

Part VI: Database Administration

Chapter 16: Database Administration and Security

**COURSE EVALUATION PROCESS (Grade Components):**

Review Questions 10%

Problem-Solving Assignments 30%

Database Technical Assignments 30%

Tests and Exams 30%

Total Percentage 100%

Final grades will be assigned on the basis of the following grading scale:

90 to 100% A

80 to 89% B

70 to 79% C

60 to 69% D

Below 60% F

REQUIRED TEXTBOOK, SOFTWARE, AND SUPPLIES:

## **Required Textbook:** Coronel, C., & Morris, S. (2016). Database systems: Design, implementation, and management (12th Edition). Cengage Learning USA. ISBN-13: 978-1305627482.

**Online Exams:** This course requires the use of Respondus Lockdown Browser/Monitor for online exams. There is no cost to the student for using this software. However, students must ensure that they can meet the software’s system requirements https://www.respondus.com/products/monitor/requirements.shtml, including a webcam with microphone and a broadband internet connection (preferably a wired connection). Mobile hotspot/phone data speeds are problematic and should not be used. The process for downloading the required software is located in the “Respondus Lockdown Browser and Monitor” module for this course and only needs to be done once for your computer and then can be used by all courses.

**IMPORTANT TECHNICAL SUPPORT CONTACT INFORMATION:**

UNA Technical Support:

* Canvas Support: Please click the 'Report a Problem' link from the Help menu within Canvas. If you cannot log-in to Canvas, then please e-mail UNA Information Technology Services (ITS) Support at [helpdesk@una.edu](mailto:helpdesk@una.edu). In this email, include your full name, UNA email address, an alternative email address (if applicable), and a phone number where you can be reached.
* Canvas FAQ: <http://www.una.edu/distance/help/canvas.html>.
* UNAPortal FAQ: [www.una.edu/faq/](http://www.una.edu/faq/)
* UNA Information Technology Services Support: [helpdesk@una.edu](mailto:helpdesk@una.edu) (from your UNA portal e-mail if possible)
* Microsoft Office 365 Download: <http://www.una.edu/its/Office365Advantage/studentsFreeOffice.html>

**ACADEMIC HONESTY—UNIVERSITY POLICY:**

Students are expected to be honorable and observe standards of conduct appropriate to a community of scholars. Additionally, students are expected to behave in an ethical manner. Individuals who disregard the core values of truth and honesty bring disrespect to themselves and the University. A university community that allows academic dishonesty will suffer harm to the reputation of students, faculty and graduates. It is in the best interest of the entire university community to sanction any individual who chooses not to accept the principles of academic honesty by committing acts such as cheating, plagiarism, or misrepresentation. Offenses are reported to the Vice President for Academic Affairs and Provost for referral to the University Student Discipline System for disposition (see “Academic Honesty” in the Academic Procedures and Requirements section of the University Catalog for more information).

**STUDENTS WITH DISABILITIES—UNIVERSITY POLICY:**

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Amendment Act of 2008, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student to contact Disability Support Services to initiate the process to develop an accommodation plan. This accommodation plan will not be applied retroactively. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Disability Support Services. Complete guidelines and requirements for documentation can be found on the DSS web pages at <http://www.una.edu/disability-support>.

***INFORMATION TECHNOLOGY ACCEPTABLE USE—UNIVERSITY POLICY***

*This acceptable use statement governs the use of computers, networks, and other information technologies at the University of North Alabama. This statement applies to all students and employees of the University, and to all other persons who may legally or illegally use or attempt to use a computer resource owned by the University, and/or is connected by any means to the campus computing network. As a user of these resources, you are responsible for reading and understanding this document. To view the entire Information Technologies Acceptable Use Statement, please see* [*http://www.una.edu/its/una-it-policy.html*](http://www.una.edu/its/una-it-policy.html)*.*

***WITHDRAWAL FROM A COURSE—UNIVERSITY POLICY:***

*During the W - Grade Withdrawal Period:*

Students may withdraw online through their Portal Self-Service Registration account. Under Registration - Add/Drop Courses, select "Web Withdraw" in the Action drop down for the class. Then, click Submit.

*During the WP/WF - Grade Withdrawal Period:*

Students may request a withdraw from a class through their Portal Self-Service Registration account. Under Registration - Add/Drop Courses, select "Request a Withdraw" in the Action drop down for the class. Then, click Submit. The instructor of the course will be notified of the request, and if approved, he or she will assign a grade of WP or WF. Once the grade has been officially recorded, the student will receive notification that the withdrawal request has been approved and processed.

Withdrawing from a course before the deadline will not affect a student's GPA or academic standing. A notation of W, WP or WF is made on a student's transcript depending on the timing of course withdrawal. See Schedule of Classes for dates.

Students are strongly advised not to withdraw from courses unless absolutely necessary. ***Students receiving Financial Aid*** should check with the Student Financial Services before withdrawing from classes. Student progress toward degree completion is checked every semester for students receiving federal grants and loans. Students must pass and complete 75% of all work attempted to maintain financial aid. ***Student Athletes*** should check with the Athletic Department as course withdrawal could affect eligibility for competition.

**TITLE IX—UNIVERSITY POLICY**

The University of North Alabama has an expectation of mutual respect. Students, staff, administrators, and faculty are entitled to a working environment and educational environment free of discriminatory harassment. This includes sexual violence, sexual harassment, domestic and intimate partner violence, stalking, gender-based discrimination, discrimination against pregnant and parenting students, and gender-based bullying and hazing.

Faculty and staff are required by federal law to report any observation of harassment (including online harassment) as well as any notice given by students or colleagues of any of the behaviors noted above. Retaliation against any person who reports discrimination or harassment is also prohibited. UNA’s policies and regulations covering discrimination and harassment may be accessed at <https://www.una.edu/titleix/>. If you have experienced or observed discrimination or harassment, confidential reporting resources can be found on the website or you may make a formal complaint by contacting the Title IX Coordinator at 256-765-4223.

**UNA PORTAL—UNIVERSITY POLICY**

The University of North Alabama’s official communication vehicle is UNA Portal. You may access your UNA Portal email through the University’s homepage at <https://www.una.edu/>. The link to Portal is at the top of the page. It is important for students to read their UNA Portal e-mail on a regular basis for information regarding University deadlines, policies, and events. These messages are outside your Canvas courses and relate to ALL University communication. Please understand the importance of each communication vehicle and the distinction between the two.

**COMMUNICATION EXPECTATIONS—COLLEGE OF BUSINESS POLICY**

Communication Methods…

* Anytime you need to communicate with your professor, please use the Canvas Inbox (left-side of page in Canvas). Please allow up to 48 hours for a reply. Correspondence received on Fridays and university holidays will not be addressed until the next regularly scheduled business day at UNA.
* Please post your questions about the course on the “General Course Questions” discussion board. For the discussion title, use your question. Always check this board before e-mailing or creating a new question post on the board. If you know the answer to a question, please feel free to post the answer. I will address the questions on this board as well.
* You may also call or drop by the office during regularly scheduled office hours. If these times do not work for you, please contact me for an appointment.