**Dillard College of Business Administration**

**SYLLABUS: Database Design and Management**

**MIS 3123, Section 101**

Fall Semester 2019

TR 11:00am – 12:20pmDB 335

## Contact Information

Instructor: Dr. Grace Zhang, Professor of Management Information Systems

Office: Dillard 273

Office hours: MWF: 10:00am -12:00pm; Also by appointments if other time is needed

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## Course Materials

* Required: Database Concepts (8th Edition), ISBN 9780133544626, by Kroenke and Auer.
* Lecture notes and other additional materials will be provided in class and on D2L.
* Codecademy free account access to interactive lessons in learning units of “Learn SQL” and “SQL: Analyzing Business Metrics” units.
* D2L access to course related activities. We will use D2L as the major communication channel for the class.

## Course Description

An examination of database management systems and their applications in business. Emphasis is placed on design, consideration of the end-user and management of database. There will be extensive hands-on use of a microcomputer-based database package.

## Course Prerequisite(s)

## MIS 3003 or concurrent enrollment in MIS 3003

## Learning Goals

General Learning Goals:

* Teambuilding and collaboration to achieve group objectives. Students will work in teams throughout this course both on the team project and on an ad hoc basis as well. There will be one major team project and presentation. Peer and instructor evaluations, as well as project requirements, will be designed to insure that all team members actively participate in activities contributing to overall team grades.
* Problem Solving and Decision Making. Various hands on workbenches, online exercises, and the codecademy interactive lessons will be the primary means by which the students learn the concepts of developing database applications in business. Hands on exercises require students to identify the requested business situation, make any necessary assumptions, assess given data/evidence, design the data model, and implement the database application. These graded hands on are a portion of the overall course grade.
* Competency in speaking and writing for common business scenarios. It is required that all team members speak during their team presentation and participate in the design, implementation, and documentation of the team project. An assessment form will be used during presentations to the individual and group efforts. This form will be provided to students and discussed well in advance of their scheduled presentations. Documentation for the prototype of the database will be expected to reach a level of professional business documentation.
* Technology Utilization. Extensive use is made of business application technology throughout the course. Various software will be demonstrated to, evaluated by, and used by, the students. ER-Assistant will be used for data modeling. And DBMS software include but not limit to Microsoft Access, SQL server express, MySQL and Oracle. Students will also demonstrate their ability to use common business computer applications by utilizing Microsoft Word, Excel, and Visio for written assignments and Microsoft PowerPoint for their team presentation. Additionally, a variety of in-class exercises will involve the use of various forms of information technology.

These general learning goals are among those established by the Dillard College of Business Administration. General learning goals represent the skills that graduates will carry with them into their careers. While assessing student performance in obtaining these general learning goals, the Dillard College is assessing its programs. The assessments will assist us as we improve our curriculum and curriculum delivery.

Course Specific Learning Goals: After completing this course, students should be able to:

* Understand the conceptual foundation of a relational model and describe the basic relational terminology.
* Perform basic SQL operations to create, modify, and delete database.
* Describe the stages of database development and construct E-R data model to represent various kinds of relationships.
* Translate the E-R data model to database design with the appropriate level of normalization.
* Understand the need for and importance of database administration: concurrency control, security, and backup and recovery.
* Understand Web database processing and describe the concepts of XML
* Lean the basic concepts of data warehouse and data marts, dimensional databases, business intelligence systems, big data, structured storage, and the MapReduce process.

## Course Policies

Attendance Policy: Regular attendance is expected and roll will be taken. Upon a student’s fifth unauthorized absence, that student will be dropped for nonattendance and receive a grade of WF for the course. Participation in class discussion is mandatory and a significant part of the overall class grade. Students must read the assigned material and complete assignments and be prepared to discuss and ask questions relating to assigned material. See the MSU Student Handbook for University Class Attendance Policy.

Missed Examination, Quiz, and In-class Exercises Policy: Only students with authorized absences (see University Class Attendance Policy) may make up missed examinations, quizzes (announced and unannounced), and in-class exercises. Arrangements must be made in advance if at all possible. In all cases, the instructor must be contacted no later than the day of the scheduled exam or no makeup will be allowed. At the instructor’s discretion, a deduction may be assessed for a late exam.

## Grading and Evaluation

Student's performance will be assessed using the following elements.

1. Exams (3): Each exam will consist of multiple-choice and true/false questions, some short answer, and/or essay questions. Exams will cover assigned chapters, in-class lectures, and any other assigned readings. Students are responsible for all assigned textbook material, even if it is not directly discussed in class.

2. Team Project: All students will participate in a group project. It is anticipated that the team project should facilitate the operations of a real business or an organization by designing and implementing a prototype of a database application. Details of the project requirements will be provided in additional document. Team formation is on a voluntary basis. The maximum of team size cannot exceed 3 students. The use of a commercial product or shareware will be done in an ethical manner.

3. Workbenches: workbenches are assigned to apply database concepts in various chapters. Students are required to finish the workbench on time. There are also two codecademy learning units will be assigned in this category: “Learn SQL” and “SQL: Analyzing Business Metrics”.

4. Attendance and Participation: Absences will be excused only for approved school trips and serious health issues. Class participation in all kinds of the formats (questions, answers, comments, and feedback) is highly encouraged to achieve reasonable participation grade. Further, ad hoc quizzes might be administrated.

Grades will be allocated using the following scheme.

| **Element** | **Percentage** | **Letter Grade** | **Numeric Grade** |
| --- | --- | --- | --- |
| Exams | 50% | A | 90-100 |
| Team Project | 20% | B | 80-89 |
| Workbenches & Codecademy | 20% | C | 70-79 |
| Attendance & Participation | 10% | D | 60-69 |
| Total | 100% | F | <= 59 |

## Academic Integrity

With regard to academic honesty, students are referred to the “Student Honor Creed” of Midwestern State University Undergraduate Catalog. Academic dishonesty (cheating, collusion, and plagiarism) is taken seriously and will be dealt with according to the official procedures. The minimum penalty is an "F" in this course and referral to the Dean of Students for disciplinary action, which may result in expulsion from the University.

Americans with Disabilities Act

If a student has an established disability as defined in the Americans with Disabilities Act and would like to request accommodation, that student should please contact me as soon as possible (i.e., within the first two weeks of the semester). This class follows the guidelines suggested by the Center for Counseling and Disabilities Services for those students who qualify for disability services. Please refer to details in Midwestern State University Undergraduate Catalog.

Campus Carry

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University’s webpage at Campus Carry Policies. If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins at [patrick.coggins@mwsu.edu](mailto:patrick.coggins@mwsu.edu).

Midterm Progress Report

In order to help students keep track of their progress toward course objectives, I might provide a “Midterm Progress Report” through student’s WebWorld account. The reported grade will be ONLY for at-risk students identified around Midterm. The midterm grades will not be reported on the students’ transcript; nor will they be calculated in the cumulative GPA. They simply give students an idea of where they stand at the midpoint of the semester. Students earning below a C at the midway point should schedule a meeting with the professor to plan for improvement during the rest of the semester.

Syllabus Change Policy

This syllabus is a guide for the course and is subject to change. It is not a contract. Syllabus changes will be communicated by notification in D2L and may or may not result in document changes. It is the student’s sole responsibility to find out if anything affecting the course requirements has changed. Please check D2L and related emails on a regular basis! It is not the instructor’s responsibility to individually inform students of changes.

Tentative schedule

Please keep this syllabus as a reference! Students are responsible for all information contained in the syllabus and for any changes to the syllabus, which will be communicated in D2L.

Schedule