MIS 310: Database Management Systems  
(Summer 2015)

Instructor  
Dr. Kumar Mehta  
Office: Enterprise Hall 145  
Contact: e-mail: kmehta1@gmu.edu; Office Hours: MWF 1:00 to 2:00 PM or by appointment

Course Materials  
Required Software: Microsoft SQL Server Express 2012 and Microsoft Visio Professional 2010/2013 are required (Available for free download and installation on personal computers through the Microsoft Developer Network Academic Alliance (MSDNAA))

Course Description  
Computerized databases are vital to the functioning of modern organizations. Businesses collect large amount of data such as names, addresses, and credit card numbers on a daily basis. All this information is stored in databases. With the proliferation of the Internet and the means to capture data in computerized form, a vast amount of data is available at the click of a mouse button. Organizing these data for ease of retrieval and maintenance is paramount. Thus managing databases has become a vital task in most organizations. In this course, we will study the fundamental concepts and techniques of modeling and designing relational databases. We will discuss why databases are used, and describe the main components of database management systems. Further, we will cover the fundamental Structured Query Language (SQL) statements used to define and process databases. Using a wealth of sample databases and examples, students will gain skills to systematically solve basic and advanced problems in query formulation, data modeling, and normalization. The course will use Microsoft Access as the relational database management system to implement the concepts covered in class.

Learning Objectives  
a. Describe the components of a database management system  
b. Introduce the relational model and define key relational database terms.  
c. Apply the Structured Query Language (SQL).  
d. Model relational databases using Microsoft Visio.  
e. Design and implement practical databases using Microsoft SQL Server

Grading  
Students must be officially registered in this course to receive a grade. It is the sole responsibility of the student to verify their own registration status. Specifically, you will not receive a grade if your name does not appear on the official class list. (Don’t wait until the end of the semester to be surprised.) Registration related questions should be directed to either the Office of Student Services at School of Business or the Registrar’s Office. Grading for the course will be based on total points earned by the end of the course. Final course letter grade assignments will be as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93% - 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90% - 93%</td>
</tr>
<tr>
<td>B+</td>
<td>87% - 89.99%</td>
</tr>
<tr>
<td>B</td>
<td>83% - 87.99%</td>
</tr>
<tr>
<td>C+</td>
<td>76% - 79.99%</td>
</tr>
<tr>
<td>C</td>
<td>70% - 75.99%</td>
</tr>
<tr>
<td>D</td>
<td>64% - 69.99%</td>
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<tr>
<td>F</td>
<td>below 64%</td>
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</table>

Mid Term Exam = 25%  
Final Exam = 35%  
4 out of 5 Quizzes = 20%  
4 assignments = 20%  
Total = 100%

Learning Goals  
Learning goals for the SOM Undergraduate Programs  
a. Our students will be competent in their discipline.  
b. Our students will be aware of the uses of technology in business.  
c. Our students will be effective communicators.  
d. Our students will have an interdisciplinary perspective.  
e. Our students will be knowledgeable about global business and trade.  
f. Our students will recognize the importance of ethical decisions.  
g. Our students will be knowledgeable about the legal environment of business.  
h. Our students will be knowledgeable about team dynamics and the characteristics of effective teams.  
i. Our students will understand the value of diversity and the importance of managing diversity in the context of business.  
j. Our students will be critical thinkers.
Learning Goals of the Information Systems and Operations Management Program

a. Apply knowledge of information technology and business functions to understand its application in assessing, designing and improving business processes.

b. Develop data organization, storage and processing solutions to support organizational needs for information management. They will also have the option of developing skills in the area of supporting decision making through business intelligence solutions.

c. Use knowledge of computer networks as part of the IT solutions for improving business processes. They will also have option of developing more advanced skills in the areas of network and security.

d. Effectively manage information technology projects.

e. Understand the overall systems development life cycle and be able to recommend IT system solutions accordingly. They will also have option of learning appropriate development tools to develop prototype of IT solutions for business management.

Course Policies

Attendance
Class Attendance is your responsibility, and you are solely responsible for all assignments, discussions, material presented/provided and announcements made in class.

Late Assignment
All assignments are due at the beginning of the class on the due date, submissions after class begins will be considered late. Please prepare in advance so that you will not encounter technical difficulties that will result in your work being considered late or not accepted. If you cannot attend class on the day an assignment is due, please make prior arrangements with me or turn in the assignment early. Late assignment submissions are subject to penalties:

- Late within 1 hour: 10% off
- Late more than 1 hour but less than 24 hours: 30% off
- Penalty after 24 hours: Not accepted

Make up Exams/Quizzes
*Final exam due date/time will not be rescheduled.* A student who misses an exam due to an emergency may petition for a makeup exam. The petition must be in writing and be accompanied by appropriate documentation about the emergency. Petitioning for a makeup exam does not guarantee that one will be offered. That decision is at the sole discretion of the instructor who will determine whether the evidence offered by the student justifies the absence. If you have any work related time conflict, you need to resolve it in advance. The decision regarding make up will be made at the sole discretion of the instructor. Missed exams/quizzes will be assigned a score of zero. *In no case will any extra credit assignments be offered.*

Communications
All communications from me to you will be directed via email. I will address all of my emails only to your GMU email address for concerns of privacy and confidentiality. If you use another e-mail account as your primary email, please be sure to forward your GMU email to that account. You are encouraged to post your questions related to the lectures and assignments to the Discussion Board on Blackboard.

Announcements and Updates
Announcements and updates may be posted on Blackboard; it is your responsibility to check Blackboard regularly for these and any supplemental course materials. Email announcements between class meetings may be sent to your GMU email account.

Policy on Electronic Devices
Technology can greatly assist learning, but it can also be a distraction. Please keep cell phones, pagers, and other communicative devices stowed away and in silent/vibration mode. Laptops or other electronic devices should strictly be used for class related activities such as taking notes or following lectures. Engaging in activities not related to the course (e.g., gaming, email, chat, etc.) is strictly prohibited and will affect your participation grade.

Disability
If you are a student with a disability and you require academic accommodations, please see me and contact the Office of Disability Services (ODS) at (703) 993-2474 (http://ods.gmu.edu/), at the beginning of the semester. All academic accommodations due to disability must be arranged through the ODS and should be made during the first two weeks of the semester.

Honor Code
The Honor Code is an integral part of university life. Students are responsible, therefore, for understanding the code’s provisions. In the spirit of the code, a student’s word is a declaration of good faith acceptable as truth in all academic matters. Cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor Code violations. To maintain an academic community according to these standards, students and faculty must report all alleged violations to the Honor Committee. *Any student who has knowledge of, but does not report, a violation may be accused of lying under the Honor Code.*
The University’s Honor Code is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this code. All acts of academic dishonesty will be dealt with in accordance with the provisions of this code. More detail on University’s Honor Code available online at [http://catalog.gmu.edu/content.php?catoid=17&navoid=1310#Honor](http://catalog.gmu.edu/content.php?catoid=17&navoid=1310#Honor).

### School of Business Recommendations for Honor Code Violations
**Adopted by the faculty May 2012**

UG-Non Freshman Students (including transfer students)

<table>
<thead>
<tr>
<th>Type of Violation</th>
<th>First Offense</th>
<th>Second Offense</th>
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</thead>
<tbody>
<tr>
<td>Plagiarism—failure to cite/attribute sources</td>
<td>An F in the class; multiple visits to the Writing Center required; and Academic Integrity Seminar Attendance</td>
<td>An F in the class; multiple visits to the Writing Center required; Academic Integrity Seminar Attendance; dismissal from the program; and possible suspension or expulsion</td>
</tr>
<tr>
<td>Plagiarism—representing someone else’s work as the student’s own</td>
<td>An F in the class; multiple visits to the Writing Center required; and Academic Integrity Seminar Attendance</td>
<td>An F in the class; multiple visits to the Writing Center required; Academic Integrity Seminar Attendance (at times of hearing and reenrollment if relevant); dismissal from the program; and possible suspension or expulsion</td>
</tr>
<tr>
<td>Cheating on an assignment, homework, class participation, or minor project</td>
<td>An F in the class; and Academic Integrity Seminar Attendance</td>
<td>Expulsion</td>
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<tr>
<td>Cheating on a major project, test, or exam</td>
<td>An F in the class; Academic Integrity Seminar Attendance; and at least one semester suspension</td>
<td>Expulsion</td>
</tr>
<tr>
<td>Egregious Violation [e.g., stealing an exam; submitting coursework from another class as original work; lying to an employer about academic performance]</td>
<td>Dismissal from the program; at least one year suspension; and attendance at Academic Integrity Seminar at the time of hearing and just prior to reenrollment</td>
<td>Expulsion</td>
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### Quiz/Homework/Exam Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Quiz/Homework/Exam</th>
<th>Date</th>
<th>Quiz/Homework/Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 18</td>
<td></td>
<td>June  5</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>8</td>
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<tr>
<td>22</td>
<td>HW1 Due / Quiz 1</td>
<td>10</td>
<td>HW3 Due / Quiz 3</td>
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<tr>
<td>27</td>
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<td>12</td>
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<tr>
<td>29</td>
<td>Quiz 2</td>
<td>15</td>
<td>HW4 Due / Quiz 4</td>
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<tr>
<td>June  1</td>
<td>HW2 Due</td>
<td>17</td>
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<tr>
<td>3</td>
<td>Mid-Term</td>
<td>19</td>
<td>Quiz 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>Final Exam</td>
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</tbody>
</table>