School of Business

MIS 410: Advanced Database Systems
Spring 2019

Class Times and Place
Times: Tuesday 7:20 PM to 10:00 PM
Location: Planetary Hall 206

Instructor
Dr. Kumar Mehta
Office: Enterprise Hall 145
Contact: e-mail: kmehta1@gmu.edu;
Office Hours: Tuesday 5:00 PM to 6:30 PM or by appointment

Course Materials
Required Software: (installation instructions on BlackBoard)
Microsoft SQL Server Express 2014
MySQL Workbench

Course Description
This course builds upon concepts and skills learned in MIS 310 (Database Management Systems). It covers advanced database development and administration topics including: physical database architecture, indexing, views, triggers, stored procedures, performance tuning, and security. We will use commercial database management system – SQL Server 2014 as the tool to familiarize with these concepts and implement them to examine the impact.

Learning Objectives
a. Design of complex databases
b. Implement complex database design using MS SQL Server
c. Design Physical DB architecture to fine-tune performance of database
d. Advanced Structured Query Language (SQL).

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>B-</td>
<td>80% - 82.99%</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>
</tr>
<tr>
<td>F</td>
<td>below 64%</td>
</tr>
</tbody>
</table>

Mid Term Exam = 25%
Final Exam = 40%
3 Assignments = 25%
Professionalism = 10%
Total = 100%

You can request a review of any grade within a week following the assignment of grades. After that period no grade will be revised. You are also encouraged to keep all graded material that is returned to you till after the semester is over and you have checked your final grade. If there is a discrepancy between my records and your scores for any of the graded material at any time, my records will be altered only if you can produce the graded material that I have returned to you as evidence -- failing which no changes will be made.

Academic Integrity and 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
Learning Goals

Learning goals for the SOM Undergraduate Programs

- Our students will be competent in their discipline.
- Our students will be aware of the uses of technology in business.
- Our students will be effective communicators.
- Our students will have an interdisciplinary perspective.
- Our students will be knowledgeable about global business and trade.
- Our students will recognize the importance of ethical decisions.
- Our students will be knowledgeable about the legal environment of business.
- Our students will be knowledgeable about team dynamics and the characteristics of effective teams.
- Our students will understand the value of diversity and the importance of managing diversity in the context of business.
- Our students will be critical thinkers.

Learning Goals of the Information Systems and Operations Management Program

- Apply knowledge of information technology and business functions to understand its application in assessing, designing and improving business processes.
- 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.
- 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.
- Effectively manage information technology projects.
- 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.
Other Course Policies

Attendance
Class Attendance is mandatory and 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

Professionalism
The grade will be based on:

- Time management such as punctuality, attendance, and leaving classroom
- Respect for fellow students and instructor – so as not to distract or disrespect anyone
- Preparedness – coming to class prepared, participating and engaging in class.

NOTE: Consistent lack of professionalism or highly unprofessional behavior can result in penalty of up to -10% points.

Make up Exams/Quizzes
Final exam due date/time will not be rescheduled.
If you have any work-related time conflict, you need to resolve it in advance.
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.
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/Blackboard.
I will address all of my emails only to your GMU email address for concerns of privacy and confidentiality. For same reason I will not reply to any email that is not from your gmu email.
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.