

DATA 620 Database Technologies Spring 2017 Syllabus

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Class Times: TuTh 5:00-6:15PM

Class Location: Old Main, Main Lab

Office Hours: M 11AM-1PM, Tu 9-10AM and 3-4PM, W 1-3PM, F 11AM-12PM,
or e-mail to request an appointment

Course Webpages: math.mercyhurst.edu/~aberardine/classes/DATA620 and
math.mercyhurst.edu/moodle

1 Course Description

A course in relational and non-relational databases, with MySQL and MongoDB as the tools of choice. Students will study SQL, database administration, database design, the differences between relational and NoSQL databases and their respective advantages, and the particulars of MySQL and MongoDB. 3 credits.

Prerequisites: None.

2 Course Objectives

A student who successfully completes this course will be able to:

- explain the difference between relational and nonrelational database models;
- compare and contrast NoSQL models including MongoDB, Cassandra, and graph databases;
- write DML queries for both relational and NoSQL databases.

3 Grading

Final Grade Calculation:

	Percentage of Final Grade
Exams (4)	15% each
Project Proposal	5%
Project Milestones	20%
Final Project Meeting	15%

Letter Grade Scale:

If you have a weighted

average of at least: 90% 85% 80% 75% 70% 65% 60% 0%

then you will earn a(n): A B+ B C+ C D+ D F

4 Course Policies

Attendance: Students are responsible for all information (notes, announcements, etc.) given in class, regardless of attendance.

E-mail: You can always e-mail me with course-related questions or to request an appointment outside of office hours. However, you should allow up to 2 days for a reply to your e-mail. Also, you should not e-mail me with questions about your grade; to discuss your grade please meet with me in person in my office. Sometimes, I will need to send out e-mail communications to the class. These communications will be sent to your Mercyhurst account. I will not send to any other e-mail account you may use, so be sure you have access to your Mercyhurst account and check it often enough to receive these important announcements in a timely manner.

Academic Integrity: Cheating and plagiarism in any form are serious offenses and will be dealt with as such. I ask you not to cheat in this course in any way, shape, or form. Some forms of cheating are pretty straightforward (for example, glancing at another student's paper during an exam or quiz and using some or part of their answer on your own exam). Other forms of cheating, plagiarism, and academic dishonesty are less obvious, especially in the world of technology. Please reference the link on the course website (or [click here](#)) for (1) what constitutes cheating and/or plagiarism in this course - so that you may avoid these behaviors - and (2) what the consequences will be for students who do not demonstrate academic integrity in this course.

Regarding Learning Differences: In keeping with college policy, any student with a disability who needs academic accommodations must call Learning Differences Program secretary at 824-3017, to arrange a confidential appointment with the director of the Learning Differences Program during the first week of classes.

Support of the Mercy Mission: This course supports the mission of Mercyhurst University by creating students who are intellectually creative. Students will foster this creativity by: applying critical thinking and qualitative reasoning techniques to new disciplines; developing, analyzing, and synthesizing scientific ideas; and engaging in innovative problem solving strategies.

Final Note: This syllabus is subject to change if deemed necessary. Any syllabus changes or addendum will be communicated in class.