CS 504-002/003 Principles of Data Management and Mining
Spring 2022

Class Time & Location
002: Monday 4:30-7:10 PM Art and Design Building 2003
003: Wednesday 4:30-7:10 PM Horizon Hall 2016

Textbooks
(Both available in Safari Books)
Data Sciences for Business: What You Need to Know About Data Mining and Data-Analytic Thinking by Foster Provost and Tom Fawcett
NoSQL Distilled: A Brief Guide to the Emerging World of Polyglot Persistence by Pramod J. Sadalage and Martin Fowler

Instructor
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Office hours: MW 3-4 PM ENGR 4608

Prerequisites
Graduate Standing
Note: This course cannot be taken for credit by students of the MS CS, MS ISA, MS SWE, MS IS, CS PhD or IT PhD programs.

Disability Accommodations
If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474, http://ods.gmu.edu . All academic accommodations must be arranged through the ODS.

Honor Code Statement
Please be familiar with the GMU Honor Code. In addition, the CS department has its own Honor Code policies. Any deviation from this is considered an Honor Code violation. All graded work must be your own effort. Any attempts at cheating will

not be tolerated, and will be turned in to the Honor Committee with significant penalty recommended. **The usual recommendation is grade of F in the course**.

Grading Scale

A^+	>98
A	92-98
A^-	90-92
B^+	88-90
B	82-88
B^-	78-82
C	68-78
F	<68

Grading Weights

Quizzes: 15%
Projects: 35%
Midterm: 25%
Final exam: 25%

Grading Policy

- All projects must be submitted on Blackboard.
- You have a budget of 3 late days which you can use as you wish for projects. No late work accepted otherwise.
- The lowest quiz score for the semester will be dropped.
- Grades will be changed only when a grading error has been made. All grade change requests are due **within a week** of the grade becoming available on Blackboard. After that week, the window to contest a grade has closed other than recording errors.
- No make-up of exams or quizzes unless **previously** arranged with the instructor.
- If any extra credit is available, it might be available on specific quiz, exam or assignment, but not as an end-of-semester batch of extra work.

Tentative Course Outline

Introduction to database management
ER & EER model
Relational data model and ER & EER to relational mapping

SQL
NoSQL
Midterm Exam
Introduction to data mining concepts
Classification
Clustering
Final Exam

Helpful Comments

Welcome to CS 504-002/003! This class is very interesting and helpful. However, a lot of material will be covered and many new concepts will be introduced. To get full benefit of the class, I would recommend you to work on the class materials regularly. For example, come to class regularly, participate in group exercises and discussions, review my slides after class, and start working on the assignments as soon as they are available on Blackboard. They often take more time than you estimate. From my experience, time management is essential to the success of this course. Good luck!