

# CS 504 Principles of Data Management and Mining

## Spring 2020

### **Class Time & Location**

002: Wed. 4:30-7:10 PM Fairfax: Innovation Hall 206

005: Mon. 4:30-7:10 PM Fairfax: Innovation Hall 206

006: Thur. 4:30-7:10 PM Arlington: Van Metre Hall 118

### **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**

Dr. Ping Deng

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Office hours: W 2-4PM

### **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. Any attempts at cheating will not be

tolerated, and will be turned in to the Honor Committee with significant penalty recommended.

### **Grading Policies**

Quizzes: 10%

Homework: 30%

Midterm: 30%

Final exam: 30%

All homework must be submitted on BLACKBOARD unless otherwise noted.

You have a budget of 3 late days which you can use as you wish for homework.

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.

### **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**

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 you have to work regularly. Read the slides and start working on the assignments as soon as they are handed out. Plan to spend 10 hrs a week on this class doing assignments and reading. Good luck, and welcome to CS 504!