

## CS 550-001: Database Systems

Spring 2019

Professor [Alex Brodsky](#)

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### Prerequisites: Prerequisites

(CS 310 and 330) or (INFS 501, 515, 519, SWE 510) or equivalent

### Required textbook (one of the following):

1. Database Systems, 2nd ed. *by Kifer, Bernstein and Lewis, Addison Wesley*
2. Database Management Systems, 3-rd ed. *by Raghu Ramakrishnan & Johannes Gehrke, McGraw-Hill*

### Recommended:

Oracle 10g reference material, e.g.,

<http://www.oracle.com/technology/products/database/oracle10g/index.html>

### On-Line Course Resources:

[GMU Blackboard \(courses.gmu.edu\)](http://courses.gmu.edu) CS 550-001 (please check frequently, at least once weekly before class for announcements)

**Lectures:** Sandbridge Hall 107

Tuesday 7:20 – 10:00 pm (see schedule below)

**Professor's Office Hours:** Thursday 3:45 – 5:15 PM (no need to schedule, but please call to verify before coming)

**Teaching Assistant:** Yue Hao, [yhao3@masonlive.gmu.edu](mailto:yhao3@masonlive.gmu.edu)

Office hours: Monday 6-8, location TBD

**Requirements:** The students are expected to attend all lectures and finish homework assignments on time. The assignment and due dates as noted above are approximate ones. The precise dates will be given on the Blackboard announcements. The students are also expected to attend the two in-class examinations.

**Project:** Important dates are listed. See project assignment for details.

**Computing Resources:**

Access to Oracle DBMS:

<https://labs.vse.gmu.edu/index.php/Services/Oracle>

VPN setup: <https://labs.vse.gmu.edu/index.php/Services/VPN>

Oracle 10g reference material, e.g.,

<http://www.oracle.com/technology/products/database/oracle10g/index.html>

**Grading policy:** The final grades assigned to the students are based on their performance on homework assignments (15%), midterm exam (33%), final exam (44%) and a semester-long project (8%). The score of 90% or higher guarantees an A grade, of 75% or higher - a B grade, of 60% or higher - a C grade. Late homework and project submission is NOT allowed. A submission is considered on time if submitted electronically on Blackboard on or before required submission date/time.

**Honor Code Information:** [GMU Honor code](#)

### Tentative Class Schedule

Date	Topic	Reading (Ramakrishnan)	HW Assig ned	HW Due	Project Due
1/22	Intro	Chapter 1			
1/29	ER Model	Chapter 2	HA 1		Project assigned
2/5	ER & Relational Model				
2/12	Relational Algebra	Chapter 4	HA2	HA 1	Preliminary Project Submission (Part 1 only)
2/19	Relational Calculus				
2/26	SQL-I	Chapter 5.1 – 5.7	HA3	HA2	
3/5	SQL-I cont.	Chapter 5.1 – 5.7			
3/12	No class – spring break				
3/19	Catch-up and review			HA3	
3/26	Midterm Exam		HA4 = Part 2 or Proj		
4/2	SQL-II	Chapter 5.1 – 5.7			
4/9	Schema Refinement and Normalization	Chapter 15	HA5	HA4 = proj. part 2	
4/16	Cont.				
4/23	Advanced Topics – Big Data and	TBD			
4/30	Catch-up and Review			HA 5	
5/7	No class – Reading Day				Final Project Submission
5/14	Final Exam (7:30pm)				