

CSCE 4355 – DATABASE ADMINISTRATION
NTDP F218, TH 5:30pm – 6:50pm

Instructor: Marty O’Neill, Ph.D.
Office: NTDP F295
Office Hours: Tuesday, Thursday 4:30 – 5:20pm, others by appointment
Teaching Assistant: Shuo Sun

Please communicate with Instructor and TA exclusively through Blackboard.

Textbook: *Database System Concepts, 6th Edition, Silberschatz, McGraw-Hill, ISBN 97800733523323*

Course Description: Database administration skills covering installation, configuration and tuning a database, administering servers and server groups, managing and optimizing schemas, tables, indexes, and views, creating logins, configuring permissions, assigning roles and performing other essential security tasks, backup and recovery strategies, automation and maintenance.

Prerequisite: CSCE 4350

Course Outcomes:

1. Install, configure and tune a database.
2. Maintain and administer servers and server groups.
3. Manage and optimize schemas, tables, indexes and views.
4. Create logins, configure permissions, assign roles and perform essential security tasks.
5. Provide adequate backup and recovery strategies and maintenance.
6. Develop scripts to automate much of the data administration necessary.

Exams: There will be three exams.

Grading:

Breakdown		Grading Scale
Attendance & Participation:	30%	A: [90, 100]
Homework:	40%	B: [80, 90)
Exam 1:	10%	C: [70, 80)
Exam 2:	10%	D: [60, 70)
Exam 3:	10%	F: [0.0, 60)

Tentative Course Schedule:

Week #	Topic
1-2	Common Data Interchange Formats
3	Databases in the Cloud
4-5	Introduction to SQL
6-7	Relational Databases: MySQL
8-10	Relational Databases: PostgreSQL
11-13	Spatial Data and Databases
13-14	DB Scripting, Automation, and Maintenance
15	NoSQL Databases

ADA: UNT complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disability Act of 1990 (ADA). If you have a disability and need a reasonable accommodation for equal access to education or services, please contact the Office of Disability Accommodation.

Attendance: Attendance in this class is mandatory. In case of verifiable emergencies, arrangements must be made with the instructor as soon as possible.

Academic Dishonesty: Academic Dishonesty will not be tolerated. Anyone found guilty of cheating or committing any other act of academic dishonesty on an exam or assignment will receive zero points for the entire unit of work and will receive a lowering of the grade for the course. Discussions of problems and assignments with your classmates are encouraged, however, sharing of solutions is not. If you need help with a concept in the course, you should ask the Grader or the Instructor. Cheating includes, but is not limited to, all forms of plagiarism and misrepresentation. For more information, please see UNT Policy 18.1.16 *Student Standards of Academic Integrity*.