

IS455 Course Roadmap Spring 2025

Week	Topics	Readings	Assignments	Final Project
1	Course Startup	Syllabus	Computing Setup	
2	Introduction to relational databases Exploring typical modes of accessing RDBs How to use MySQL Workbench & other tools How to Retrieve Data From a Single Table	Murach Chaps. 1 - 3	MGS Chap. 2 MGS Chap. 3	
3	How to retrieve data from two or more tables	Murach Chap. 4	MGS Chap. 4	
4	How to insert, update, and delete data	Murach Chap. 5	MGS Chap. 5	Brainstorm
5	Conceptual data modeling	Oppel Chaps. 1, 2, 3, 5	Conceptual Data Model	Brainstorm
6	Logical database design using normalization	Oppel Chap. 6	Logical Database Design	Brainstorm
7	Physical database design and implementation	Oppel Chap 8. Murach Chaps. 10, 11	Physical Database Design and Implementation	Brainstorm
8	How to create views	Murach Chap. 12	MGS Chap. 12	Brainstorm
9	Spring Break			
10	How to code summary queries	Murach Chap. 6	MGS Chap. 6	Proposal Due
11	How to code subqueries	Murach Chap. 7	MGS Chap. 7	Work On
12	How to work with data types How to use functions	Murach Chaps. 8, 9	MGS Chap. 8 MGS Chap. 9	Work On
13	How to use transactions and locking How to backup and restore a database	Murach Chaps. 14, 19	MGS Chap. 14 MGS Chap. 19	Work On
14	Course Wrapup			Work On
15	Lab session for final project			Work On
16	Lab session for final project			Deliverables Due
17	Final Exam Period			