

**GUIDELINES FOR DATABASE DESIGN AND DATABASE PROGRAMMING  
LESSON DURATIONS**

Semester 1	Day 1 - 45 Minutes	Day 2 - 45 Minutes	Day 3 - 45 Minutes	Day 4 - 45 Minutes	Day 5 - 45 Minutes
Week 1	S1: Introduction				S2: What is Data Modeling
Week 2	S2: What is Data Modeling?		SS: Effective Questioning	S3: Entity Relationship Diagramming	
Week 3	S3: Entity Relationship Diagramming		S4: Supertypes, Subtypes, and Business Rules		
Week 4	S4: Supertypes, Subtypes, and Business Rules		S5: Working with Entity Relationships		
Week 5	S5: Working with Entity Relationships			S6: Unique Identifiers and Normalization	
Week 6	S6: Unique Identifiers and Normalization		S7: Arcs, Hierarchies, and Historical Data		
Week 7	S7: Arcs, Hierarchies, and Historical Data	SS: What is a Consultant?	SS: Overcoming the Fear Factor	S9: Project Presentation	
Week 8	S9: Project Presentation			S10: Modeling Change	
Week 9	S10: Modeling Change	SS: Leaders in Information Technology	SS: What About Me?	Exam Review	<b>MIDTERM</b>
Week 10	S11: Drawing Conventions and Generic Modeling		SS: The Changing Nature of Work	S12: Transforming from Conceptual Model to Physical Model	
Week 11	S12: Transforming from Conceptual Model to Physical Model			S13: Introduction to SQL	
Week 12	Final Project			S14: System Development Life Cycle	Final Project
Week 13	S15: Final Project				
Week 14	S15: Final Project				
Week 15	S16: SELECT Statements and Relational Database Technology				SS: Career Portfolio
Week 16	S17: Where Clause			SS: Work Experience and Community Involvement	
Week 17	S18: Restricting Rows and Introduction to Functions		SS: Mock Interviews	S18: Restricting Rows and Introduction to Functions	
Week 18	Exam Review	Exam Review	<b>FINAL</b>		

Semester 2	Day 1 - 45 Minutes	Day 2 - 45 Minutes	Day 3 - 45 Minutes	Day 4 - 45 Minutes	Day 5 - 45 Minutes
Week 1	S1: Character, Number, and Date Functions				
Week 2	S2: Single Row Functions				
Week 3	S3: Database Joins				
Week 4	S4: Advanced Join Techniques				
Week 5	S5: Group Functions				
Week 6	S6: Group By and Having Clauses, and Subqueries				
Week 7	S7: DML Statements				
Week 8	Exam Review	Exam Review	Exam Review	<b>MIDTERM</b>	
Week 9	S8: DDL Statements				
Week 10	S9: Constraints				
Week 11	S10: Views				
Week 12	S11: Sequences				
Week 13	S12: Database Security				
Week 14	S13: Amazing Books Final Project				
Week 15	S13: Amazing Books Final Project				
Week 16	S14: Database Transactions	Exam Review			<b>Final Exam</b>
Week 17	Certification Preparation				
Week 18	Certification Preparation				