



# STARK STATE COLLEGE

## GENERAL SYLLABUS

### Course Information

**Course Name:** Data Modeling and Database Design  
**Course Number:** CPD121

### Required Materials

**Textbook(s):** Database Concepts, Ninth Edition - Kroenke, Auer, Vanderberg, Yoder  
 Paperback ISBN-13: 9780135188149  
 Pearson+ digital subscription – Single ISBN-13: 9780135790717  
*NOTE: The Pearson+ digital book contains embedded tutorial videos for the labs not available with the paperback.*

**Required Readings:** Assigned textbook

**Additional Materials:** None

### Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

### 16-Week Calendar

Week	Chapter/Topic/Lab
Week 1	<b><u>Introductions / Ch 1 Getting Started (Database Concepts)</u></b> <i>Reading Assignment: Ch 1 (pg 3-31)</i> <ul style="list-style-type: none"> <li>• Introduce Yourself</li> <li>• Syllabus Quiz</li> <li>• Chapter 1 Review Quiz</li> </ul>
Week 2	<b><u>Ch 1 Getting Started (Database Concepts) Access Workbench</u></b> <i>Reading Assignment: Ch 1 (pg 32-60) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>• Chapter 1 Access Workbench Exercise (pg 65-67)</li> </ul>
Week 3	<b><u>Ch 2 The Relational Model</u></b> <i>Reading Assignment: Ch 2 (pg 70-87) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>• Chapter 2 Review Quiz</li> <li>• Chapter 2 Exercise</li> </ul>
Week 4	<b><u>Ch 2 The Relational Model – Normalization</u></b> <i>Reading Assignment: Ch 2 (pg 88-100) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>• Chapter 2 Normalization Review Quiz</li> <li>• Chapter 2 Normalization Exercise</li> </ul>

<b>Week</b>	<b>Chapter/Topic/Lab</b>
Week 5	<b>Ch 2 The Relational Model Access Workbench</b> <i>Reading Assignment: Ch 2 (pg 101-118) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 2 Access Workbench Exercise (124-127)</li> </ul>
Week 6	<b>Exam #1</b> <i>Review Study Guide</i> <ul style="list-style-type: none"> <li>Exam #1 (NO LATE SUBMISSIONS ALLOWED)</li> </ul>
Week 7	<b>Ch 4 Data Modeling and the ERD / Appendix G Microsoft Visio</b> <i>Reading Assignment: Ch 4 (pg 273-303) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 4 Review Quiz</li> </ul> Entity Relationship Diagram Exercise
Week 8	<b>Ch 4 Data Modeling and the ERD Access</b> <i>Reading Assignment: Ch 4 (pg 303-337) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Appendix H–Access Workbench Switchboard (see appendix in Materials folder)</li> </ul>
Week 9	<b>Ch 5 Database Design</b> <i>Reading Assignment: Ch 5 (pg 348-378) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 5 Review Quiz</li> <li>M:N Relationship Exercise</li> </ul>
Week 10	<b>Ch 5 Database Design Access</b> <i>Reading Assignment: Ch 5 (pg 378-386) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 5 Access Workbench Exercise (390-391)</li> </ul>
Week 11	<b>Ch 3 Structured Query Language (SQL)</b> <i>Reading Assignment: Ch 3 (pg 134-177) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 3 SQL Review Quiz</li> <li>Chapter 3 SQL Exercise</li> </ul>
Week 12	<b>Ch 3 Structured Query Language (SQL Advanced)</b> <i>Reading Assignment: Ch 3 (pg 178-203) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 3 Advanced SQL Review Quiz</li> </ul>
Week 13	<b>Ch 3 Structured Query Language (SQL) Access Workbench</b> <i>Reading Assignment: Ch 3 (pg 204-233) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 3 Access Workbench Exercise (240-241)</li> </ul>
Week 14	<b>Final Project</b> <ul style="list-style-type: none"> <li>Final Project Submission</li> </ul>
Week 15-16	<b>Exam #2</b> <i>Review Study Guide</i> <ul style="list-style-type: none"> <li>Final Exam</li> </ul>

## 8-Week Calendar

<b>Week</b>	<b>Chapter/Topic/Lab</b>
Week 1	<b>Introductions / Ch 1 Getting Started (Database Concepts)</b> <i>Reading Assignment: Ch 1 (pg 3-31)</i> <ul style="list-style-type: none"> <li>Introduce Yourself</li> <li>Syllabus Quiz</li> <li>Chapter 1 Review Quiz</li> </ul> <b>Ch 1 Getting Started (Database Concepts) Access Workbench</b> <i>Reading Assignment: Ch 1 (pg 32-60) &amp; Materials in LMS</i> <ul style="list-style-type: none"> <li>Chapter 1 Access Workbench Exercise (pg 65-67)</li> </ul>
Week 2	<b>Ch 2 The Relational Model</b> <i>Reading Assignment: Ch 2 (pg 70-87) &amp; Materials in LMS</i>

Week	Chapter/Topic/Lab
	<ul style="list-style-type: none"> <li>• Chapter 2 Review Quiz</li> <li>• Chapter 2 Exercise</li> </ul> <p><b><u>Ch 2 The Relational Model – Normalization</u></b>  <i>Reading Assignment: Ch 2 (pg 88-100) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 2 Normalization Review Quiz</li> <li>• Chapter 2 Normalization Exercise</li> </ul>
Week 3	<p><b><u>Ch 2 The Relational Model Access Workbench</u></b>  <i>Reading Assignment: Ch 2 (pg 101-118) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 2 Access Workbench Exercise (124-127)</li> </ul> <p><b><u>Exam #1</u></b>  <i>Review Study Guide</i>  Exam #1 (NO LATE SUBMISSIONS ALLOWED)</p>
Week 4	<p><b><u>Ch 4 Data Modeling and the ERD / Appendix G Microsoft Visio</u></b>  <i>Reading Assignment: Ch 4 (pg 273-303) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 4 Review Quiz</li> <li>• Entity Relationship Diagram Exercise</li> </ul> <p><b><u>Ch 4 Data Modeling and the ERD Access</u></b>  <i>Reading Assignment: Ch 4 (pg 303-337) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Appendix H–Access Workbench Switchboard (see appendix in Materials folder)</li> </ul>
Week 5	<p><b><u>Ch 5 Database Design</u></b>  <i>Reading Assignment: Ch 5 (pg 348-378) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 5 Review Quiz</li> <li>• M:N Relationship Exercise</li> </ul> <p><b><u>Ch 5 Database Design Access</u></b>  <i>Reading Assignment: Ch 5 (pg 378-386) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 5 Access Workbench Exercise (390-391)</li> </ul>
Week 6	<p><b><u>Ch 3 Structured Query Language (SQL)</u></b>  <i>Reading Assignment: Ch 3 (pg 134-177) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 3 SQL Review Quiz</li> <li>• Chapter 3 SQL Exercise</li> </ul> <p><b><u>Ch 3 Structured Query Language (SQL Advanced)</u></b>  <i>Reading Assignment: Ch 3 (pg 178-203) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 3 Advanced SQL Review Quiz</li> </ul>
Week 7	<p><b><u>Ch 3 Structured Query Language (SQL) Access Workbench</u></b>  <i>Reading Assignment: Ch 3 (pg 204-233) &amp; Materials in LMS</i></p> <ul style="list-style-type: none"> <li>• Chapter 3 Access Workbench Exercise (240-241)</li> </ul> <p><b><u>Final Project</u></b></p> <ul style="list-style-type: none"> <li>• Final Project Submission (NO LATE SUBMISSIONS ALLOWED)</li> </ul>
Week 8	<ul style="list-style-type: none"> <li>• <b>Exam #2</b></li> </ul>