



SQL Fundamentals

CPT 322 |

Southwestern College Professional Studies

COURSE SYLLABUS

I. Course Catalog Description

Using SQL server, learners retrieve information from various relational databases. Beginning with simple queries that retrieve selected data from a single table, the course progresses to advanced queries that summarize data, combine it with data from other tables, and display the data in specialized ways.

II. Required and Supplementary Instructional Materials

Pratt, P. J., & Last, M. Z. (2015). *A guide to SQL* (9th ed.). Boston, MA: Course Technology, Cengage Learning.

III. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each course and each [undergraduate](#) and [graduate](#) program of study, as well as [institution-wide outcomes](#) related to the mission and vision of the college. Outcomes can help learners and instructors focus on the big picture of the learning experience and can help inform potential employers about a graduate's knowledge and skills.

Upon successfully completing this course, the learner will be able to:

- Describe and explain key terms, concepts, operators, functions, and other critical elements related to Structured Query Language (SQL), database design, and SQL and database operations.
- Demonstrate proficiency in assessment of database requirements, database design, design representation via an entity-relationship diagram, and creation of other design and user documentation.
- Explain, create, and apply queries to create, maintain, retrieve, and summarize data with single and joined tables.
- Exercise critical thinking in the design and use of SQL queries and databases.
- Illustrate the application of ethical reasoning in the design and securing of databases.

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

IV. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the blackboard course.

V. Course Requirements:

Requirements	Number of Assignments	Points Possible	Percent of Grade
Discussions	6	300	30
Units 1-5 Assignments	5	400	40
Final Project	1	300	30
Total Points		1,000	100

VI. Course at a Glance:

Unit	Reading & Preparation Activities	Graded Work Due
1	<ul style="list-style-type: none"> Click the Start Here link, review the section, and become comfortable navigating the course. Read <i>Pratt & Last</i> Chapters 1-2 Review the chapter PowerPoint presentations. Download and install Microsoft SQL Server Express 2012¹ Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Introductions discussion Unit 1 Discussion Unit 1 Colonial Adventure Tour exercises: pg. 57, Exercises 1-3 Unit 1 Solmaris Condominium Group: pg. 58, Exercises 1-3
2	<ul style="list-style-type: none"> Read <i>Pratt & Last</i> Chapter 3 Review chapter PowerPoint presentation. Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Unit 2 Discussion Unit 2 Colonial Adventure Tours exercises: pg. 90-92, Exercises 1-4, 8 Unit 2 Solmaris Condominium Group: pg. 93-95, Exercises 1-4, 7
3	<ul style="list-style-type: none"> Read <i>Pratt & Last</i> Chapters 4-5 Review the chapter PowerPoint presentations. Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Unit 3 Discussion Unit 3 Colonial Adventure Tours exercises: pg. 130-131 (Chapter 4), Exercises 1-5, 7, 8, 11 Unit 3 Solmaris Condominium Group: pg. 165-166 (Chapter 5), Exercises 1, 4, 7, 8, 14
4	<ul style="list-style-type: none"> Read <i>Pratt & Last</i> Chapter 6 Review chapter PowerPoint presentation. Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Unit 4 Discussion Unit 4 Colonial Adventure Tours exercises: pg. 189, Exercises 1-4, 7 Unit 4 Solmaris Condominium Group: pg. 190, Exercises 1-4, 7
5	<ul style="list-style-type: none"> Read <i>Pratt & Last</i> Chapters 7-8 Review the chapter PowerPoint presentations. Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Unit 5 Discussion Unit 5 Colonial Adventure Tours Exercise: pg. 223-224 (Chapter 7), Exercises 1, 3, 6 Unit 5 Solmaris Condominium Group: pg. 265-266, Exercises 1, 2, 3, 7
6	<ul style="list-style-type: none"> Review the final project instructions. Review all of the chapter PowerPoint presentations. Participate in the Collaborate session or review the recording. 	<ul style="list-style-type: none"> Unit 6 Discussion Final Project

VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies [Standard Syllabus](#) in Blackboard. You may be required to log in.

¹ <https://www.microsoft.com/en-us/sqlserver/editions/2012-editions/express.aspx>