

Undergraduate Course Syllabus

IT 220: Introduction to SQL

Center: Online

Course Prerequisites

IT 145 and IT 204

Course Description

Structured Query Language (SQL) is at the heart of most data systems. In this course, students will learn the basics of SQL programming as it relates to both database management and data manipulation. This course will also provide students with an overview of more advanced topics such as embedded SQL, function calls, and stored procedures.

Course Outcomes

- Ensure the integrity and functionality of programs by identifying and correcting syntax errors in SQL statements
- Apply proper SQL syntax in the retrieval, sorting, and restriction of data
- Develop meaningful information by combining data from multiple sources using SQL syntax and logical data manipulation and management methods
- Perform accurate calculations by aggregating data and applying SQL summary functions
- Assess the functionality of embedded SQL, functional calls, and stored procedures within various scenarios
- Articulate the fundamental concepts of SQL application within data analytics to a variety of audiences

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

SQL Bible
Alex Kriegel and Boris M. Trukhnov
John Wiley and Sons
Second Edition
2008
9781118940884

Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of	Point Value	Total Points
	Graded Items	per Item	
Short Papers	2	35	70
Exercises	14	30	420
Final Project			
Final Project Milestones	7	30	210
Final Submission	1	300	300
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

		Total Points:	1,000	
<u>Grade</u>	Numerical Equivalent	Points	Points E	quivalent
			Lower	Upper
Α	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
В	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
С	73-76	2	730	769
C-	70-72	1.67	700	729
D+	67-69	1.33	670	699
D	60-66	1	600	669
F	0-59	0	0	599
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

*Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition & Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. EST on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Icebreaker Activity (Required)
	Relational Database Management Systems
	SQL Bible, Chapter 1
	1-1 Exercise: Course Tool Setup
	1-2 Final Project Milestone One
2	Introduction to SQL and SQL Data Types
	SQL Bible, Chapters 2 and 3
	2-1 Short Paper: Reference Chart
	2-2 Exercise: Database Diagram
	2-3 Final Project Milestone Two
3	Creating and Altering RDBMS Objects
	SQL Bible, Chapters 4 and 5
	3-1 Exercise 1: Explain the Purpose of SQL Statements
	3-2 Exercise 2: Create Statements
	3-3 Final Project Milestone Three
4	Retrieving Data
	SQL Bible, Chapter 8
	4-1 Exercise 1: SELECT Statements
	4-2 Exercise 2: SELECT Statements With Sorting
	4-3 Exercise 3: SELECT Statements From Multiple Tables
	4-4 Final Project Milestone Four

5	Inner and Outer Joins		
	SQL Bible, Chapter 9		
	5-1 Exercise: SELECT Statements With Inner and Outer Joins		
	5-2 Exercise: SELECT Statements With Inner and Outer Joins and Sorting		
	5-3 Final Project Milestone Five		
6	6 Populating Databases, Sessions, Transactions, and Locks		
	SQL Bible, Chapters 6 and 7		
	6-1 Exercise 1: INSERT Statements		
	6-2 Exercise 2: UPDATE Statements		
	6-3 Final Project Milestone Six		
7	SQL Functions		
	SQL Bible, Chapters 10 and 14		
	7-1 Exercise 1: SQL Functions		
	7-2 Exercise 2: Stored Procedures		
	7-3 Final Project Milestone Seven		
8	SQL Operators		
	SQL Bible, Chapter 11		
	8-1 Exercise: SQL Operators		
	8-2 Short Paper: Embedded SQL		
	8-2 Final Project Submission		

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the full late assignment policy.

Attendance Policy

Failure to participate during the first week of the course (12:00 a.m. Monday through 11:59 p.m. Sunday) will result in automatic withdrawal. Participation is defined as posting within a discussion board, wiki, or blog, and/or submitting an assignment. Students who do not participate during the first week forfeit their rights to be reinstated into the course.

Extended absences, defined as failure to post into the Blackboard classroom for more than five days, must be coordinated with the instructor. Students who fail to coordinate any such absence with the instructor, or who fail to withdraw from the course in accordance with the COCE official drop and withdrawal policy, will be graded appropriately.

All assignments must be submitted through the appropriate Blackboard tool by 11:59 PM Eastern Standard Time on the specified due date. Refer to the Assignment Guidelines and Rubrics folder for specific details on completing the assignments in this course.

SNHU College of Online and Continuing Education Withdrawal Policy

https://my.snhu.edu/_layouts/FormServer.aspx?XsnLocation=https://my.snhu.edu/FormServerTemplates/COCE.
Withdrawal.revised.form.xsn&SaveLocation=https%3A%2F%2Fmy%2Esnhu%2Eedu%2FOffices%2FCOCE%2FAdvisin
g%2FCourse%20Withdrawal%20Library&OpenIn=browser

SNHU College of Online and Continuing Education Guide to Student Success

https://my.snhu.edu/Resources/StudentHandbooks/Pages/default.aspx

Blackboard Course Tools/Areas Overview

Your course will be delivered through Blackboard. Below are the most often used Blackboard tools and areas.

Tool/Area	Description	You Should
Announcements	This area is used to post day-to-day course details such as the status of or directions for assignments.	Check the announcements on a regular basis, at least several times each week.
Course Information	The course syllabus, assignment guidelines and rubrics, technical support, Student Handbook, and advising information can be found here.	Check this area at the start of the class. It is recommended that the syllabus be downloaded for future reference.
Learning Modules	This area contains course content, including lectures, readings, resources, and assignments.	Check this area at the start of each module and throughout the module week to review course materials.
Discussion Board	This is one of the areas for discussion and collaboration in the class.	Participate and contribute on a regular basis if your course includes discussions.
Research/Writing	SNHU library and research information can be found here.	Check this area for links and information on different library-related resources.
My Instructor	Instructor information is located in this area.	Check this area to find out about your instructor's background and contact information.
My Grades	Assignment grades are located in this area.	Check this area to find out your grades for your course assignments.

Southern New Hampshire University Policies

More information about SNHU policies can be found at https://my.snhu.edu/Academics/Pages/SyllabiStatements.aspx.

Continuing Education Center Instructor Availability: All undergraduate Continuing Education instructors at all center locations (Manchester, Nashua, Salem, Portsmouth, and Brunswick, Maine) will be available to students for a minimum of four additional hours of face-to-face meeting time per term. This time is in addition to the required 20 hours of face-to-face time in hybrid classes and the required 40 hours of face-to-face time in lecture classes. How the additional meeting time is utilized is at the discretion of the instructor and may vary by course.

Academic Honesty Policy: Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Students involved in such activities are subject to serious disciplinary action. Plagiarism is defined as the use, whether by paraphrase or direct quotation, of the published or unpublished work of another without full and clear acknowledgment. Cheating includes the giving or receiving of unauthorized assistance on quizzes, examinations, or written assignments from any source not approved by the instructor. Understand that in taking this course, your assignments may be submitted to Turnitin.com or other plagiarism-detection services and reviewed for textual similarity suggestive of plagiarism. All submitted papers are subsequently included as source material in the Turnitin.com database for the purpose of detecting plagiarism in other submitted work. Please review the Turnitin.com Usage Policy should you have any questions. For more about academic dishonesty, please refer to the undergraduate or graduate catalogs.

ADA/504 Compliance Statement: Southern New Hampshire University is committed to and concerned with meeting the needs of students challenged by physical, sensory, psychiatric and/or learning disabilities with regard to the Americans with Disabilities Act (ADA), as amended, and Section 504 of the 1973 Rehabilitation Act. At the beginning of each term, or as soon as you become aware of a disability, we encourage you to contact the Office of Disability Services to discuss accommodations for which you may be qualified.

For questions concerning support services, documentation guidelines, or general disability issues:

Office of Disability Services, Exeter Hall, Suite 59

Hyla Jaffe, Director

603.626.9100 ext. 2386

h.jaffe@snhu.edu

For questions concerning disability-related compliance matters, grievance, or legal issues:

Ms. Jet Goldberg, ADA/504 Compliance Officer

Director of Wellness Center

603-645-9679

j.goldberg@snhu.edu

Technical Support: If you need assistance with Blackboard or other technology issues, contact the SNHU Help Desk via online form submission or chat at http://www.snhu.edu/techsupport or by phone at 1.855.877.9919. Technical support is available 24/7.

Academic Assistance: Online students enrolled in undergraduate courses in the areas of math, writing, accounting, and statistics will have access to Smarthinking online tutoring:

https://my.snhu.edu/offices/COCE/Tutoring/Pages/default.aspx.

Library Resources Statement: In addition to the intellectual resources available onsite and online, https://my.snhu.edu/Academics/Library/Pages/default.aspx, Shapiro Library makes available group and one-on-one instruction in information literacy, enabling students to define and articulate what knowledge-based

resources are relevant to their research interests. Library staff are available to assist students in effectively and efficiently accessing information from credible sources, to compare new knowledge with prior beliefs, and to consider the related ethical, legal, and socioeconomic issues that are inherent in scholarly investigation.

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