Course Description
This course is a comprehensive query writing course for Microsoft SQL Server versions 2005, 2008, and 2008 R2. If you struggle with knowing the difference between an INNER and an OUTER JOIN, when to use a LEFT vs. a RIGHT JOIN, and things like the 'how and why' of subqueries then this is an ideal course for you. This is not a beginners course: this course is for someone with at least a basic understanding of the SELECT statement. This course also makes extensive use of LearnItFirst’s video exercises which include complete walk-throughs of the solutions (and come with the .sql files containing both the problems and the solutions).

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- Chapter 6 - Complex SQL: Subqueries, CTEs, Derived Tables and More
- Chapter 7 - SQL Design Patterns

Pricing and Multi-User Licensing
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$99.95 per user
- Purchasing this course allows you access to view and download the videos for one full year
- Course may be watched as often as necessary during that time
Who Is This Course Designed For?

This course is designed for someone who has at least a basic understanding of SELECT statements and help them transition into an intermediate to intermediate-advanced query artist. Prior working experience with SQL Server 2000, SQL Server 2005, or SQL Server 2008 will help you get the most out of this course.

Pre-Requisites

While a true beginner could take this course, it is actually recommended that you have at least 30 days experience working with the SELECT statement prior to taking this course. Server (or equivalent work experience with another database system) prior to taking this course.

About the Instructor

Scott Whigham is the founder of LearnItFirst.com, one of the web’s most extensive video training libraries focusing on technical training. Scott is also an experienced consultant, trainer, and author with more than a decade of hands-on experience working with SQL Server databases, writing and debugging applications using Visual Studio, and performance tuning. Scott designed the architecture (websites, class libraries, and database) for the LearnItFirst.com websites and, most recently, was involved in upgrading the websites and support applications from Visual Studio 2005 to Visual Studio 2008 and to SQL Server 2008. Before founding LearnItFirst, Scott had been an independent consultant since 1998 focusing on SQL Server and .NET performance tuning and data warehousing. Scott has been asked to speak and train at events in the United States and Europe. As an author, Scott has written courses on SQL Server and C# and VB languages as well as popular articles for top-selling magazines and the MSDN (Microsoft Developer Network) library.

Frequently Asked Questions

- “How do I access the videos?” You can access the videos 24/7 online via our website.
- “Do I have to have internet access to watch the videos?” No! Users can download the videos to their hard drive.
- “How long are the videos?” The videos are broken into 10 minute task-oriented segments designed to teach you a single task.
- “How many videos are in a course?” It depends on the topic; courses can have anywhere from 20 - 200 videos!

For More Details

Visit http://www.learnitfirst.com/Course/160/SQL-Queries-2008.aspx for more information and to watch free sample videos from this course.

- Course ID: 160
- Skill level: 100-500
- Run Time: 42+ hours (209 videos)

42+ hours of instructor-led training!

Videos in this course:

Chapter 1: An Introduction and History of the SQL Language

1.1 - Course Introduction - What Is Covered in this Course?
1.2 - Course Introduction - Who Should Take this Course?
1.3 - Why this Course is So Important: Is It the Greatest Course Ever?
1.4 - What SQL Is and Isn’t
1.5 - Terms You Should Know
1.6 - ISO and ANSI SQL: Who’s in Charge Here?
1.7 - What is Transact-SQL and How Does It Fit?
1.8 - What Versions of SQL Server Does this Course Use?
1.9 - SQL Coding Conventions and T-SQL Coding Conventions, Part 1
1.10 - SQL Coding Conventions and T-SQL Coding Conventions, Part 2
1.11 - Introduction to the Databases Used in this Course
1.12 - How to Install the Course Database on Your Machine
1.13 - How to Get the Most Out of this Course, Part 1
1.14 - How to Get the Most Out of this Course, Part 2
1.15 - How the Exercises Are Designed to Help You
1.16 - Operating Systems, SQL Server Versions, and Differences
1.17 - Make Your Choices and Stick to It!
1.18 - Using SQL Server Management Studio
1.19 - How to Use the Exercises in this Course
1.20 - Exercise: Using SQL Server Management Studio
1.21 - Exercise: Installing the Course Database on Your Machine
1.22 - Exercise: Using Books Online to Troubleshoot and Learn
Videos in this course (cont.):

Chapter 2: Writing Single Table Queries - Building Your Foundation

2.1 - Chapter Introduction: What is Included in this Chapter
2.2 - SQL Fundamentals: Terms You Should Know
2.3 - SQL Fundamentals: Things You Should Know Before You Begin Writing SQL Queries
2.4 - SQL Fundamentals: How to Take the Guesswork Out of Writing Queries
2.5 - How to Use Database Diagrams in SSMS
2.6 - How to Create a Database Diagram Using SQL Server Management Studio
2.7 - Exercise: Create Your Database Diagram for LearnItFirstWorks_Lite
2.8 - LearnItFirstWorks_Lite Demo: Understanding the Database (Demo)
2.9 - Exercise: Understanding the LearnItFirstWorks_Lite Database
2.10 - LearnItFirstWorks_200x Demo: Understanding the Database (Demo)
2.11 - SELECT: The Basics of the SELECT Statement
2.12 - SELECT: Column Aliases and Table Aliases
2.13 - ORDER BY: The Basics of the ORDER BY Clause
2.14 - Exercise: Writing Basic SELECT Statements and Sorting Data
2.15 - WHERE: Writing Single Predicate WHERE Clauses
2.16 - WHERE: Think Positive!
2.17 - WHERE: Using the Conditional Operators
2.18 - WHERE: Using IN and NOT IN
2.19 - WHERE: Using BETWEEN and NOT BETWEEN
2.20 - WHERE: Using LIKE for Pattern Matching, Part 1
2.21 - WHERE: Using LIKE for Pattern Matching, Part 2
2.22 - WHERE: FAQs About Working with LIKE
2.23 - Exercise: Writing Single Predicate Queries (Conditional Operators)
2.24 - Exercise: Writing Single Predicate Queries (IN, BETWEEN, and LIKE)
2.25 - Understanding How SQL Processes Queries and a Discussion About Using Column Aliases
# Writing Queries for SQL Server


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- **Skill level:** 100-500
- **Run Time:** 42+ hours (209 videos)

42+ hours of instructor-led training!

## Videos in this course (cont.):

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### Chapter 3: Using and Understanding Scalar Functions and Data Types

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- CourseId: 160    • Skill level: 100-500    • Run Time: 42+ hours (209 videos)

Videos in this course (cont.):

Chapter 3: Using and Understanding Scalar Functions (cont.)

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3.10 - The Style Parameter of the CONVERT Function
3.11 - Working with Strings (Manipulation, Capitalization, and Middle of String)
3.12 - Working with Strings (Trimming, Length, Replacement)
3.13 - Rounding and Truncating with the ROUND Function
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3.17 - Formatting Dates with the CONVERT Function’s Style Parameter
3.18 - DATEADD, DATEDIFF, and the Secrets They Hide
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3.22 - More on Using CASE: The Searched Format and Best Practices
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3.26 - Looking at ROW_NUMBER(), RANK(), DENSE_RANK(), and NTILE()
3.27 - Exercise: Working with CASE and the Windowing Functions

Chapter 4: Writing JOINs and UNIONs - The Tools of the Trade

4.1 - Chapter Introduction: What is Included in this Chapter
4.2 - Understanding the Difference Between Set Operators and Joins
4.3 - UNION Queries
4.4 - More UNION Query Examples and Syntax
### Writing Queries for SQL Server (2005/2008 Edition)

- CourseId: 160
- Skill level: 100-500
- Run Time: 42+ hours (209 videos)

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4.31 - Examples of Writing Two Table LEFT and RIGHT JOINs
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4.34 - Understanding the JOIN Processing Sequence is Critical
4.35 - WHERE Clause or JOIN Condition: Which One to Use?
4.36 - Finding Only ‘A’ or Only ‘B’ (i.e. Missing Data Pattern)
4.37 - Self OUTER Joins - Whew!
4.38 - Exercise: Two Table OUTER JOINs
4.39 - 3+ Table OUTER JOIN Syntax and Processing Sequence
4.40 - More 3+ Table OUTER JOINs and Chaining
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5.2 - Understanding How Aggregates Change Everything
5.3 - The Basic Aggregates: Examples and Syntax
5.4 - How Aggregates Handle NULLs and Data Types
5.5 - A Tale of Three COUNTs
5.6 - Using GROUP BY with Aggregates

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Videos in this course (cont.):

Chapter 5: Writing Aggregate Queries, GROUP BY, and More (cont.)

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5.8 - How Many Rows Will My Aggregate Query Return?
5.9 - Exercise: Using GROUP BY
5.10 - GROUP BY with a JOIN
5.11 - Pivot Tables and Cross Tab Queries
5.12 - Design Pattern #1 for Pivot Tables and Crosstabs
5.13 - Exercise: JOINs, Aggregates, and Crosstabs
5.14 - The HAVING Clause: A Filter for Your Aggregates
5.15 - How to Decide Between WHERE and HAVING
5.16 - Design Pattern #1 for Finding Duplicate Data (HAVING)
5.17 - How Many Rows Will My Aggregate Query Return? (DJ Scott Remix)
5.18 - Exercise: Filtering Aggregates
5.19 - Subtotals and Grand Totals in SQL: ROLLUP
5.20 - Subtotals and Grand Totals in SQL: CUBE and the GROUPING Function
5.21 - Subtotals and Grand Totals in SQL: GROUPING SETS
5.22 - Aggregates and Window Functions - Breakin’ the Rulez
5.23 - Exercise: Advanced Aggregates

Chapter 6: Complex SQL: Subqueries, CTEs, Derived Tables and More

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6.2 - An Introduction to Subqueries 101
6.3 - Simple Subqueries in the WHERE Clause
6.4 - How to Decide Between WHERE, HAVING, or Simple Subquery
6.5 - Subqueries and Operators - Know the Rules!
6.6 - Working with NULLs and Simple Subqueries
Videos in this course (cont.):

Chapter 6: Complex SQL (cont.)

6.7 - How to Decide Between a JOIN and a Subquery
6.8 - Design Pattern for Finding Non-Matched Rows with a Simple Subquery
6.9 - Simple Subqueries in the SELECT Column List and CASE
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6.14 - Column Prefixes and Scoping in Subqueries
6.15 - Design Pattern: How to Calculate Running Totals in SQL
6.16 - Exercise: Writing Correlated Subqueries in the Column List
6.17 - Correlated Subqueries in the WHERE Clause with EXISTS()
6.18 - Using EXISTS() with Correlated Subqueries
6.19 - Design Pattern: Rewriting a Natural JOIN to Become a Subquery
6.20 - Design Pattern #2 for Finding Duplicate Data (EXISTS)
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6.22 - Derived Tables: What They Are and How to Use Them
6.23 - How to Nest Aggregates Using Derived Tables
6.24 - Using a Derived Table to Replace Repeated Aggregates in Subqueries
6.25 - Filtering on Window Functions Using Derived Tables
6.26 - Design Pattern #3 for Finding Duplicate Data (RANK)
6.27 - PIVOT and Crosstab Queries with Derived Tables
6.28 - Design Pattern #2 for Pivot Tables and Crosstabs
6.29 - Exercise: Partying Hard with Derived Tables
6.30 - Common Table Expressions (CTEs): What They Are and How to Use Them
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Chapter 6: Complex SQL (cont.)
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- 6.33 - Recursive Queries: An Introduction
- 6.34 - Recursive CTEs with SQL Server 2005
- 6.35 - How to Sort Recursive CTEs in SQL Server 2005, Part 1
- 6.36 - SQL Server 2008’s HierarchyID Data Type
- 6.37 - Recursive CTEs with SQL Server 2008
- 6.38 - Exercise: Writing CTEs

Chapter 7: SQL Design Patterns
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- 7.2 - Two Table JOIN Pattern: INNER Natural JOINs
- 7.3 - Three Table JOIN Pattern: INNER Natural JOINs
- 7.4 - Two Table JOIN Pattern: OUTER Natural JOINs
- 7.5 - Two Table JOIN Pattern: Finding Only Non-Matched Rows
- 7.6 - Design Pattern #1 for Pivot Tables and Crosstabs
- 7.7 - Design Pattern #1 for Finding Duplicate Data (HAVING)
- 7.8 - Design Pattern for Finding Non-Matched Rows with a Simple Subquery
- 7.9 - How to Calculate Running Totals in SQL
- 7.10 - Design Pattern: Rewriting a Natural JOIN to Become a Subquery
- 7.11 - Design Pattern #2 for Finding Duplicate Data (EXISTS)
- 7.12 - Design Pattern #3 for Finding Duplicate Data (RANK)
- 7.13 - Design Pattern #2 for Pivot Tables and Crosstabs

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