CIS 261 STRUCTURED QUERY LANGUAGE - Course Syllabus

Section:	5714 Spring 2020	**Instructor:**	Donna Moran
Class Time:	Online	**Office:**	Online
Classroom:	Online	**Telephone:**	864-3341 (prefer email)
Credits:	5 cr.	**Email:**	dmoran@pierce.ctc.edu or use Canvas messaging (preferred)
Prerequisites:	CIS122 or CIS123, AND CIS 260 each with a 2.0 or better (may be taken concurrently); or instructor permission.	**Office Hours:**	Online appointment as needed.
Department:	Computer Information Systems		

Welcome to the Class!

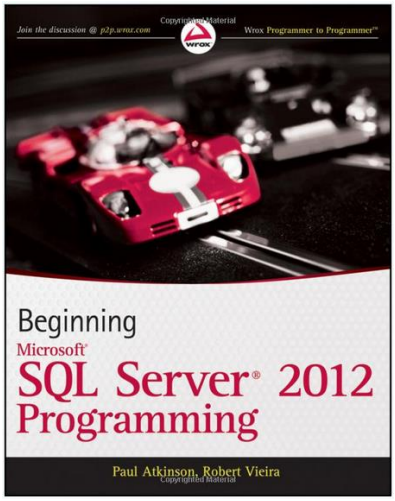
My name is Donna Moran, and I will be your instructor for this course. I support the Computer Information Systems and Health Information Technology teams, and teach a number of Computer Information Systems (CIS) courses. My background can be seen on my LinkedIn profile: https://www.linkedin.com/in/donnammoran.

I enjoy teaching business and systems analysis and database courses because these skills cross all fields and careers. I spent years in the industry that you are studying, and I know the industry very well. It is a privilege for me to pass along what I learned over the course of my career.

I've spent my IT career as a programmer, an analyst, a trainer, an educator, and an IT project manager. I started working with databases using Microsoft Access. It didn't take too long to outgrow that product, and I moved on to working with Microsoft SQL Server and Oracle.

I love data, analytics, and making organization out of chaos. I hope you too catch the bug. If you are an industry veteran, I hope you can find value in this course. Either way, I look forward to going on this journey with you.

Class Materials



Electronic storage for all assignments (thumb drives, OneDrive, Google Docs, etc.); You will use screencasting software to complete your assignments. A free tool called Screencast-O-Matic is recommended, and training for this tool is provided on the Canvas site.

The textbook: Beginning Microsoft SQL Server 2012 Programming 1st Edition. This can be purchased in the bookstore or commercially.

You will need a webcam to be able to record your image in a screencast. These are available online for under $10. In addition, a USB microphone/headset combination will be required for the duration of this course. These can be purchased anywhere electronics are sold for approximately $20.

Students will also need either a home Windows compatible computer capable of running SQL Server Express, or time to get to the CIS/CNE labs to do their work.

Course Summary

Introduction to Structured Query Language (SQL), the industry-standard language for storing, retrieving, displaying, and updating data in a relational database. Includes an introduction to extensions to standard SQL such as a procedural language extension such as Procedural Language-SQL (PL/SQL) or Transact-SQL (T-SQL).

By the end of this course, at a minimum:

1. Students will master the use of Microsoft SQL Server Management Studio.
2. Students will be able to describe what Structured Query Language is, and why it is used.
3. Students will be able to identify the main clauses of a SQL query.
4. Students will be able to identify the keywords of the SQL language.
5. Students will be able to write single table and multi-table queries using joins.
6. Students will be able to write queries that sort and filter data.
7. Students will be able to identify and choose the correct data types for querying.
8. Students will be able to use built-in functions in queries.
9. Students will be able to write queries that aggregate data.
10. Students will be able to write queries that make use of T-SQL variables
11. Students will be able to write queries that take advantage of subqueries

Course Layout and Time Requirements

This course is laid out in (10) modules that span 10 weeks. There is also a “Week Zero” module with work that should be done prior to the first class meeting. There is also a “Begin This Course Here” module that contains other useful information about the course, college success skills and more. You will need to view all of the pages in the both of these modules before you can begin actual coursework.

You can see all of the modules, and the module content and assignments when you log into the Canvas course website.

Being an online course, you should expect to spend at least (15) hours per week outside of class learning the material and completing assignments.

Classroom Management

This course continues a rigid sequence of courses preparing the student to assume a high skill level and high responsibility level career path in information systems, including web design and development. Therefore, this class will set professional expectations of punctuality, respect, responsibility, accountability, ethics and effective communication. Global IT teams are the norm, so students are advised to consider participation in this course to be similar to being employed in the Information Technology field, and to act accordingly.

Course Website

A CANVAS website has been set up to manage this class. All assignments will be submitted through the website, and grades will be posted there as well. You may also expect to engage in online conferencing and other online activities. If you are unfamiliar with Canvas, you can get oriented here.

E-mail and Other Notifications

You are expected - and required - to check your student e-mail on a daily basis during the week. You should also check the Canvas site daily for announcements, corrections and other important information regarding this course. Not knowing about course changes and announcements is not an excuse for not responding to them.

External Site Requirements

You must set up a Lynda.com account (available free through the Pierce County library system, or with a monthly paid subscription through Lynda.com). See the Canvas site “Week Zero Work” module for instructions on each of these items.

Course Content

1. Structured Query Language (SQL)

2. Relational Databases
3. Queries
4. Data Management
5. Analysis
6. Data Manipulation Language (DML)
7. Data Control Language (DCL)
8. Data Definition Language (DDL)
9. SQL procedural programming extension

Student Outcomes

1. Describe American National Standards Institute (ANSI) Structured Query Language
2. Analyze, design, and create relational databases.
3. Format Structured Query Language queries.
4. Query and create views of databases.
5. Validate and manage data.
6. Differentiate Data Manipulation Language versus Data Definition Language versus Data Control Language.
7. Update data.

Grading Scale and Assignment Submission Policy

Grading is not weighted. Each assignment has a potential point value. The points are tallied and compared to the points available. You can always know your grading progress by using the "Grades" tool in Canvas.

90-100 = A (3.5-4.0); 80-89 = B (2.5-3.4); 65-79 = C (1.0-2.4). The grade conversion is as follows: 95% or higher for the course grade (see Canvas for your course total) will be converted to a 4.0. 94% converts to a 3.9, 93% to a 3.8, etc. With each 1% decrease, the course grade decreases 0.1 grade point. DO BE AWARE: Any grade below a 2.0 will not permit you to continue to the next CIS database courses.

Each assignment has a clearly spelled out due date. Each course has many students and several topics. In order for us to move forward and not leave others behind, all assignments need to be reviewed and graded in a timely manner. This is a summary of the late grading policy:

- ***There is an official zero-acceptance policy on late submissions***. This means that there is no guarantee that a late submission will be accepted for grading.

- At the instructor's sole discretion, and with ***prior approval from the instructor***, an assignment may be turned in late if circumstances warrant. These circumstances might include a medical emergency or work travel. If you need to turn in an assignment late, check with the instructor ahead of time.
- If you have an excused late assignment, you will be expected to submit the assignment within a reasonable period of time from when you are again capable. Generally, late assignments should be turned in a few days from when you begin participating in class after your absence.

Cheating & Plagiarism

Cheating and plagiarism will not be tolerated in this class, and will result in a zero grade for the quarter. See the college catalog, or the instructor, if you are unsure of these concepts. http://www.pierce.ctc.edu/about/policy/studentrr.

The nature of many of the assignments involve creating a video file whereby you demonstrate your completed work, and fully explain what you have done. The intent here is to allow me to feel confident that you are both doing your own work, and are learning and applying the material.

Tentative Class Schedule

The following schedule is tentative and subject to change as the course progresses. See the official college calendar for withdrawal and drop deadlines.
http://www.pierce.ctc.edu/studentlife/calendars/academic

Week 1 Introduction to SQL Server & Management Studio; Begin T-SQL Queries

Week 2 Continue T-SQL Queries

Week 3 T-SQL Queries exam; T-SQL Sorting and Filtering

Week 4 T-SQL Joining Tables

Week 5 T-SQL Other DML Statements

Week 6 T-SQL Data Types & Built-In Functions

Week 7 T-SQL Grouping

Week 8 T-SQL Variables

Week 9 T-SQL Subqueries

Week 10 T-SQL Set Operators

All work is to be submitted as we progress through the course. Each quiz and assignment should be considered an exam (they are formative assessments), and all rules of exams shall apply. This shall apply to all students and all tutors. Check the applicable Pierce College policies if you have any questions on this matter.

Reasonable Accommodations for Faith/Conscience:

Students who will be absent from or endure significant hardship in course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made in writing within the first two weeks of the beginning of the course. Students should review the Accommodations for Faith/Conscience Policy and follow the procedures: https://www.pierce.ctc.edu/policy-faith-conscience.

Special Needs:

Pierce College values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, inclusive, and welcoming. If you have or think you may have a disability that may affect your work in this class and feel you need accommodations, contact Access and Disability Services at ADS@pierce.ctc.edu or (253) 912-3606 (Ft. Steilacoom) or (253) 864-3383 (Puyallup and JBLM) to see if you are eligible to receive services.
If you are already approved for accommodations through the ADS, have requested your accommodations for this quarter and would like to use your accommodations in my class please connect with me outside of class time to discuss your needs.

Emergency School Closure

In the event of an emergency school closure, please check your college email during class time. In the event of an emergency school closure, we will conduct class via CANVAS.