St. Petersburg College

SPC

COURSE SYLLABUS

CTS2433 SQL Database Design and Programming

Section 1373

Online Instruction

0625 Fall (2) 2023

View How to Be a Successful Student which provides details about success factors and links to the most current version of fluid information, such as the academic calendar.

Welcome

Welcome to CTS2433 SQL Database Design and Programming.

Instructor

Name: Jay Dugan

Email: Use in-course email for all course related communications

Office and Online Hours: By Appointment

Office Location: Virtual

Instructor Webpage: Professor Dugan's Webpage

ACADEMIC DEPARTMENT

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SPC Technologies Degrees

Course Information

Course Description

This course is designed to familiarize individuals with the SQL relational database including database programming and development. A series of database application projects using SQL software is designed to build familiarity with ER database modeling, database creation, database programming, and database optimization. Database architectures including the client/server model and distributed database model are presented. The objective is to build a working knowledge and hands-on familiarity with SQL.

Course Goals

1. The student will acquire data manipulation language skills in SQL.
2. The student will use tables, stored procedures, views and functions.
3. The student will examine custom datatypes.
4. The student will interact with SQL using a programming language.

Course Objectives

1. The student will acquire data manipulation language skills in SQL by:

    a. writing data manipulation language.
    b. utilizing programming libraries requiring data manipulation language.

2. The student will use tables, stored procedures, views and functions by:

    a. creating objects in SQL with data definition language.
    b. creating programming objects with data definition.

3. The student will examine custom datatypes by:

    a. creating relational database management system triggers and constraints with data definition language.

b. creating triggers and constraints by applying data manipulation language to the relational database management system.

4. The student will interact with SQL using a programming language by:

a. writing datasets that can be used by presentation layers of an n-tier development.
b. writing a presentation layer that integrates with the implemented data layer.
c. learning secure strategies for implementing applications using SQL by writing code that mitigates the risk of attack from end-users of database applications.

Prerequisites

COP1000 with a minimum grade of C.

Course Content

This course is broken down into seven modules designed to provide the student with an overview of SQL database design and programming.

Basic knowledge assimilation occurs through reading the prescribed text and a number of important assignments. Knowledge is tested by quizzes designed to verify reading comprehension of the material presented in the assignments. A number of questions will relate directly to the specific reading assignments.

This course uses weekly sessions to enrich the course and promote interaction as a vital skill in improved idea creation, analysis, and decision-making.

Availability of Course Content

Modules will be open at the beginning of each week with assignments due at the end of the week. Due dates are firm and at the discretion of each instructor. This is not a self-paced course, therefore working ahead is not allowed.

Required Textbook and Other Resource Information

Required Textbook: A Guide to SQL, 10th Edition (e-text)

Publisher Information: Cengage Learning

ISBN: 978-0357709313

View the Textbooks site.

View the Learning Resources site.

Learner Support

View the Accessibility Services site.

If you have documentation of a disability or feel you may have a disability:

St. Petersburg College recognizes the importance of equal access to learning opportunities for all students. Accessibility Services (AS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students registered with AS, who are requesting accommodations, are encouraged to contact their instructor by the first week of the semester. Students who have, or think they may have, a disability (e.g. learning disability, ADD/ADHD, psychiatric, medical/orthopedic, vision, and/or hearing), are invited to contact the Accessibility Coordinator (AC) that serves your campus for a confidential discussion. To find your AC for your specific campus, please go to the college-wide Accessibility Services website.

View the Academic Support site.

View the On-Campus and Online Support site.

View the Student Services site.

It is important to seek assistance from you instructor or someone from a campus Learning Support Center well in advance of the weekly due date. Do not wait until the last minute.

Answers to questions regarding accommodations may be found at the Accessibility Services site. If you are in need of accommodations, please contact a campus Accessibility Services Coordinator. If you need a Sign Language Interpreter, complete the Interpreter/Captionist Request Form.

Titans Care

As an SPC student it's vital that you know Titans Care. You can access resources through SPC's Student Assistance Program (SAP), a collaborative resource for students with mental health or general life issues. SAP provides help and education in suicide prevention, mental health, substance abuse awareness and more. It is SPC's belief that supporting mental wellness is everyone's charge, and that one loss as a result of substance abuse, mental illness, or suicide is one too many. If you or a loved one are considering suicide, please call the National Suicide Prevention Lifeline at 1-800-273-8255.

View the Learning Resources site.

View the Learning Center Tutoring Schedules.

View the Student Services site.

Articulate or link to:

Important Dates

Course Dates: View the Academic Calendar.

Drop Date: View the Academic Calendar.

Withdrawal Date: View the Academic Calendar.

Financial Aid Dates: View the Financial Aid Dates.

Attendance

View the college-wide attendance policy included in How to Be a Successful Student.

The college-wide attendance policy is included in the Syllabus Addendum at http://www.spcollege.edu/addendum/. Please refer to this addendum for complete information about the college-wide attendance policy.

For blended class sections, attendance is defined as arriving on time, participating with group discussion, and remaining until dismissed by the instructor at each meeting. The roll is taken at every class meeting. More than one missed class will likely have a negative effect on your final grade. In addition to regular attendance, active participation is also monitored. If you are not routinely completing discussion forums, quizzes, and lab assignments you risk being dropped from the course for lack of active participation. If you miss more than three classes overall you may also risk withdrawal for lack of active participation, regardless of your current course grade. Students that are withdrawn from class will no longer have access to the MyCourses content for the class.

For online class sections, attendance and participation are determined by active interaction in the weekly discussion forums and submission of assignments. Failure to complete at least 50% of the work each week will be deemed as lack of active participation in the course.

Active participation means that:

- You will have read the materials and completed any assignments by the posted due dates.
- You will engage with and respond to your peers during online or in class discussions or posts; you will listen attentively to every speaker and respond respectfully to the ideas of others both in class and in the virtual venue.
- You will exhibit a deliberate effort to apply, extend, and challenge concepts that we generate in class and in the virtual venue.
- You will demonstrate your curiosity and willingness to ask questions, advance comparisons, and make observations.

*If you are late to class and the class is already underway, confirm that I have updated your attendance for the day to a tardy. More than one extreme tardy may have a detrimental effect on your final grade.

Grading

Describe the grading system by which the student's coursework will be assessed. Specify how assignments and other course components are weighted in regard to overall course grade. The grading system should address opportunities for success across different learning styles and examination methods that test higher order cognitive and affective skills. If this is an SPC College Writing Requirement course, you need to demonstrate how this requirement is being accomplished. You will clarify your policy on late assignments as well as extra credit (If applicable).

The grading scale will be based upon your performance on an average of the following projects and examinations:

Category	Percentage

Discussion Forums	20%
Case Exercises (Dropbox)	35%
Module (Chapter) Tests	35%
Career Ready Skills Program Quizzes	10%

No late assignments are accepted for grading. There is no extra credit or make up available in this course.

How to check your Grades and review feedback:

- Checking Your Grades
- Reviewing Dropbox Submissions
- Checking Discussion Grades and Feedback
- Reviewing Quiz Submissions

Grading Scale

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 0-59%

Collaboration Rule

Students may work with other students on programming assignments, but submitted programs must be entirely the work of the submitting student. Please do not refer to course materials from previous terms.

In the MyCourses drop box for each assignment, list:

- All collaborators, including SPC tutors.
- All written sources that you consulted, other than the text and course handouts from this term.
- If you had no collaborators and consulted no written sources, then write, “I worked alone.”

Homework without a collaboration statement will not be graded. Collaboration on quizzes and tests is not allowed. If you somehow violate the collaboration policy, your best option is to tell us before we notice. Mistakes you confess are forgivable.

Assignments

In this section, you may list assignments, information on the date due, scope of assignment and relative weight toward the final grade in the course. If applicable create a separate web page for the list of assignments and place a prominent link to the assignments page on the syllabus page. In this section, you can also add any formatting requirements for assignments (i.e., APA, etc.)

Students' expectations and instructor's expectations

All college-wide policies and expectations are included in Student Responsibilities

Required Interaction

Assignments will be graded weekly at which time any instructor feedback will be available. Please allow 24 hours for instructors to respond to emails and phone calls regarding questions about content or other concerns.

Participation, Conduct, and Netiquette

SPC has outlined expectations for student behavior and interaction for online discussions, email, and other forms of communication. View the Student Expectations at How to Be a Successful Student.

We will be using the SPC MyCourses Learning Management System and Cengage MindTap environments throughout this course. You will be using the systems to submit assignments electronically, take quizzes & exams, post to discussion forums, and for communication.

It will be the student's responsibility to complete and submit all weekly assignments prior to the deadline. There will be no extensions.

Please use proper "net etiquette" when posting to the discussion board.

Academic Honesty

View the Academic Honesty Policy.

Copyright

Turnitin

The instructor of this course may require use of Turnitin.com as a tool to promote learning. The tool flags similarity and mechanical issues in written work that merit review. Use of the service enables students and faculty to identify areas that can be strengthened through improved paraphrasing, integration of sources, or proper citation. Submitted papers remain as source documents in the Turnitin database solely for the purpose of detecting originality. Students retain full copyright to their works. Review the Turnitin Usage Agreement. Students who do not wish to submit work through Turnitin must notify their instructor via course email within the first seven days of the course. In lieu of Turnitin use, faculty may require a student to submit copies of sources, preliminary drafts, a research journal, or an annotated bibliography.

View the Reviewing a TurnItIn/Originality Report tutorial.

Student Survey of Instruction

The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

Technology

Minimum Technology Requirements

View the Technical Requirements for MyCourses.

SPC offers Microsoft Office software to current students at no additional cost. The software is available for both Windows and Mac computers. View the How to Download Microsoft Office 2016 tutorial.

Required Minimum Computer Hardware and Software Specifications for CCIT Online/Blended Classes

Item	Recommended Minimum Technology Requirements for CCIT Programs
Processor	Dual-core processor (Intel or AMD) or better **(MUST BE CAPABLE OF VIRTUALIZATION)**
Memory	4 GB (or higher)
Disk Storage	Adequate free space for storage of class files
Video Card	256 MB (or higher)
Monitor/Speakers	15” or larger Flat LCD Panel
Media Drive	16x DVD +/- RW
Operating System	Windows 7 (or higher)

Network Interface	High Speed Broadband Internet Connection (Cable or DSL)
Software	Microsoft Office Suite 2010 or later with the following: • Word • Excel • Access • PowerPoint

Access requirements	Reliable and daily access to a personal computer (PC) from day 1 of class as below:
	• Ability to download/upload documents and files
	• Browsers:
	  ◦ Internet Explorer (version 11 or higher)
	  ◦ Firefox (version 31.0 or higher
	  ◦ Google Chrome 36.0

These are the minimum suggested technology requirements necessary to complete the programs within CCIT. All students and instructors are required to have access to a personal computer, personal high speed access to the Internet, and a college provided email account. The “minimum requirements” pertain to Windows Operating System compatible personal computers. These minimum requirements are a general recommendation for all CCIT courses. Some courses may have additional software and hardware requirements in order for students to be successful. **NOTE: Mac computers are not acceptable for most of the courses and may cause the student undue frustrations. Instructors do not support issues with Mac computers.**	

Minimum Technical Skills

Specify the minimum technical skills expected of the learner: general and course-specific learners must have to succeed in the course.

Students should know how to navigate the course and use the course tools. Dropbox-style assignments may require attachments in either Microsoft Word (.doc or .docx) or Rich Text Format (.rtf), so that they can be properly evaluated. If an attachment cannot be opened by the instructor, students will be required to re-format and re-submit an assignment so that it can be evaluated and returned with feedback.

MyCourses tutorials are available to students new to this LMS and are located at the beginning of the course. Most features on MyCourses are accessible on mobile devices, although it is recommended that you use a computer for quizzes, tests, and essay assignments.

Technical Support

Technical support is available via the SPC Technical Support Center.

Accessibility of Technology

- MyCourses (Brightspace by Desire2Learn) Accessibility
- Turnitin Accessibility
- Google (YouTube) Accessibility
- Ensemble Accessibility
- Cengage Accessibility
- McGraw-Hill Accessibility
- Pearson Accessibility

Privacy

- MyCourses (Brightspace by Desire2Learn) Privacy
- Turnitin Privacy
- YouTube Privacy
- Ensemble Privacy
- Cengage Privacy
- McGraw-Hill Privacy
- Pearson Privacy

Instructional Continuity Plan

To be prepared in the event of weather or other emergency disruptions, review the Emergency Preparedness Procedures for Students.

Time Commitment

This is a 3-credit course conducted over 8 weeks. On average, students should expect to spend approximately 12 hours per week on course activities and assignments. Spending less time would be insufficient for success in this course. Some important information is provided in the Assignments and Due Dates section.

Miscellaneous

Once you have reviewed the syllabus and assignment checklist, please complete the Syllabus Quiz to gain access to the Module 1 content.