GREENVILLE TECHNICAL COLLEGE

School of Business and Computer Technology
Computer Technology
Course Syllabus
Database Programming IST 278
Fall 2020

Credit/Contact Hours:
3.0

Prerequisite:
IST 272 and MAT102 or higher. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Co-requisite:
None

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Course Description:
This course is a study of advanced database techniques. Topics will cover procedures, triggers, query optimization, and user security.

Purpose of Course:
To teach the student about programming using a relational database design. Students will get practical experience setting up users, assigning permissions, creating database objects, and using a programming language to interact with the database. Students will complete database design projects.

Required Texts:
1. Beginning SQL Server 2012 Programming; Paul Atkinson, Robert Vieira; Wrox – Wiley Publishing;

        ISBN: 978-1-118-10228-2

2. Students in hybrid and online classes will access their online content through Blackboard.

Additional Materials, Supplies, Equipment, and Technology (i.e. Webcams):
A computer capable of running SQL Server 2019 is required for this course. The following link provides details: **System Requirements**

Tutoring is now available in the Business Division Student Lab located on the Barton Campus in the Engineering Building (#103), Room 113. The hours for tutoring are posted in the lab (ET 113); no appointment is necessary. There are no fees required for this service.

Instructional Agreement:
This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading, and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resources area of Blackboard.

Grading Scale:
Fifteen (15) percent of the final grade will be based on successful completion of programming assignments and a two-page paper that discusses the use of SQL around the world.

Points will be deducted for the following on all lab assignments:

- Incorrect results.

- Documentation that is missing or incomplete.

- Documentation that is not neat, clean, or readable.

- Lateness.

Fifteen (15) percent of the final grade will be based on a group project.

Forty-five (45) percent of the final grade will be based on test grade averages.

Twenty-five (25) percent of the final grade will be based on the comprehensive final examination.

All work (i.e., tests, labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the work.

NOTE: ALL TESTS AND EXAMS ARE RETAINED BY THE INSTRUCTOR.

Final letter grades will be issued as follows:

A	=	90	100
B	=	80	89
C	=	70	79
D	=	60	69
F	=	0	59

Pass/Non-Pass Course Grade Option:
This course may be eligible for the Pass/Non-Pass Course Grade Option. A student must request this option prior to the withdrawal date of this course. If approved for this option, a grade of P will be assigned if the student earns a grade of C or higher. A grade of NP will be assigned for earning a D or F. Students are encouraged to talk with their instructor and meet with an advisor prior to requesting this option. Additional information may be found in the college catalog. Click on this link or additional information: Pass/Non-Pass

Instructional Continuity:
In the event of a disruption to the normal class schedule or planned activities for this course, alternate learning activities that may include other methods of instruction or locations may be implemented. If disruption occurs, your instructor will communicate through your GTC email (Gmail) account. Additionally, please make sure your contact information is accurate in GTC's emergency alert system (accessible in GTC4Me/Quick Access/GTC2me – Emergency Messaging).

Verification of Student in Online Classes:
Greenville Technical College is committed to student learning and the academic integrity of all courses. All GTC online courses are required to have at least one

proctored learning activity that constitutes a significant percentage of the course grade, which may include a test, midterm, final exam, presentation or other assignment. Proctored is defined as an experience where an approved person ensures the identity of the student and monitors the learning activity. The proctored learning activity will be determined by the course instructor. The method of proctoring and any additional requirements, such as costs for students and/or trips to campus or approved testing center, will be explained in the course schedule/plan of instruction.

Honorlock:
Honorlock will proctor your exams this semester. Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home. You **DO NOT** need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection. For additional information on using Honorlock, click here.

Course Outcomes:
Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. Demonstrate the ability to take initiative by completing a lab assignment with minimal supervision.

2. Demonstrate the ability to work under pressure and show responsibility by completing lab assignments.

3. Demonstrate trigger knowledge by completing a trigger lab.

4. Demonstrate stored procedure knowledge by completing a stored procedure lab.

5. Demonstrate data manipulation language T-SQL knowledge by completing a data manipulation language T-SQL lab.

6. Demonstrate data definition language T-SQL knowledge by completing a data definition language T-SQL lab.

The objectives of the IST 278 course are intended to meet the CPT program level student learning outcomes.

Assessment of Student Learning:
Greenville Technical College is committed to continuous improvement of teaching and learning. Tests, assignments, and/or projects required in this course may be shared with college faculty and used for assessment purposes. Also, student input is necessary for

improving instruction and is requested through course evaluations. Students will be notified when evaluations are available.

Administrative Withdrawals:
Students may be administratively withdrawn from this course for the following reasons:

- **NIC (Never in Class)** Not attending a course during the drop/add period including failure to meet the attendance criteria in an online course. In this case, a grade of WA will be assigned. This WA will not count as an attempt and will not affect GPA.
- **14-Day Rule:** At any time during the semester and regardless of a student's use of financial aid benefits, the college will withdraw a student who is not in attendance for 14 consecutive calendar days including weekends, holidays, college breaks, and cancelled class sessions.
  - *Prior to the course withdrawal date,* the college policy is to assign a grade of W (Withdrawal). The student will earn no credits or grade points, and the W will not affect GPA. For students receiving financial aid, the course will count as an attempt and may affect future aid.
  - *After the course withdrawal date*, the college will assign a grade of WF for the course which will negatively affect GPA calculation. The student will be responsible for course payment and will not be eligible for a refund. The college will notify the student of the administrative withdrawal via official college email address. For students receiving financial aid, the course will be recorded as an attempt and may affect future financial aid awards.

Students may request a reinstatement. Reinstatements must be approved by the course instructor.

Course Policies:
IST 278 – MAIN TOPICS

PLAN OF INSTRUCTION:

CHAPTER   MAJOR TOPICS

Chapter   1 – Basics
Chapter   2 – Tools of the trade
Chapter   3 – The Foundation statements of T-SQL
Chapter   4 – Joins
Chapter   5 – Creating and Altering Tables
Chapter   6 – Constraints
Chapter   7 – More Queries
Chapter   9 – SQL Server Storage and Indexing Structures
Chapter 10 – Views
Chapter 11 – Scripts and Batches
Chapter 12 – Stored Procedures

Chapter 13 – User Defined Functions
Chapter 14 – Transactions and Locks
Chapter 15 – Triggers
Chapter 16 – XML, MISC, Backups, Security

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.

Students with Disabilities:
Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. ***This must be done each term***. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113.

Students may reach staff by phone at (864) 250-8202 or via email to DisabilityServices@gvltec.edu. Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability Services. Visit http://gvltec.edu/disability-services for more information.

The college is committed to providing materials that are accessible to all students. However, if you experience any difficulty accessing materials, please notify your instructor immediately so that we can provide a solution. You may also contact Student Disability Services directly at (864) 250-8202 or by email at DisabilityServices@gvltec.edu.

Students who need a PDF reader to access course documents presented in PDF formats may download Adobe Reader from https://get.adobe.com/reader.

Blackboard Ally

Blackboard Ally is a tool to improve students' experiences within online courses. It enables students to convert files in a course to more accessible formats such as HTML, electronic braille, audio and more. For more information, refer to Blackboard Ally for Students located in Student Resources in the course menu.

Technology Statement:
Greenville Technical College is not responsible for personal technology or internet access. Problems with computers, devices, or internet access are not acceptable for late work. When completing gradable coursework online, be sure to access a secure, reliable internet connection (preferably hardwired).

All technical questions should be directed to technical support. For details, visit https://www.gvltec.edu/about_greenvilletech/tech_support.

Students can access due dates for all assignments and quizzes/tests on the Course Schedule/Plan of Instruction. All graded work is time-stamped when submitted, so your

instructor can check the time of submission. In addition, you will receive a confirmation email message when you submit assignments via Blackboard. You must provide this confirmation information in case of any dispute regarding the submission.

Computer labs are available at multiple campus locations and offer various hours as well as staff who are available for assistance. For more information, please visit https://www.gvltec.edu/student_resources/computer_labs.

Student should use Microsoft Office programs or PDF format for submitting assignments in Blackboard. Students can access http://portal.office.com, log in with their <username>@my.gvltec.edu email address and Blackboard/GTC4me password, then follow the prompts to install Microsoft Office free of charge.

FERPA Policy:
Because Greenville Technical College abides by FERPA privacy guidelines, personal email accounts may not be used for any College-related communication. Faculty and students must use the college Gmail system only.

Start, Stay, Succeed!