## Southeast Technical Institute 2320 N Career Ave Sioux Falls, SD 57107

**COURSE NAME: CIS 279 Advanced Database** 

**CREDIT(S):** 3 semester hours **INSTRUCTOR:** Roger Morris

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**TEXT:** Murach's SQL Server 2016 for Developers by Bryan Syverson and Joel Murach

**ISBN**: 978-1-890774-96-7 **SOFTWARE:** SQL Server

**COMPANION WEBSITE:** None

#### **COURSE DESCRIPTION:**

This course introduces students to the popular relational database management system (RDBMS) of Microsoft SQL Server. General features of MS SQL Server will be explored to allow the student to get a good understanding of the RDBMS. Data stored in MS SQL Server will then be retrieved and manipulated using reporting features to present the data in an accurate and readable fashion to the end user.

#### **COURSE OBJECTIVES:**

Upon successful completion of this course, the student shall be able to

- 1. Define and utilize database terminology effectively.
- 2. Review and learn how DML is used in MS SQL server.
- 3. Build and use constraints effectively.
- 4. Create efficient queries using SQL.
- 5. Create Transact SQL for solving problems programmatically.
- **6.** Write triggers for solving problems.
- 7. Build reports using reporting features.

### **METHODS OF INSTRUCTION:**

- Lecture, LCD presentations and demonstrations.
- Individual laboratory and written assignments, team projects & presentations

## **COURSE REQUIREMENTS:**

<u>Schedule</u>: 2 hours lecture per week <u>Lab Time</u>: 2 hours instructor-supervised lab per week <u>Prerequisites</u>: CIS194 Database.

<u>Test Makeups and Retakes</u>: If a student is absent on the day of an exam, the student will need to take the exam within 1 week of the exam date. Test retakes may be considered by the instructor, and arranged on an individual basis. Test retakes are averaged with the original exam score.

<u>Late Assignments</u>: Students shall demonstrate responsibility and commitment to learning by submitting all assignments on or before the designated due date and by attending all scheduled classes. Points may be deducted from the assignment for each day the assignment is late. Some late assignments may not be accepted, as decided by the instructor.

<u>Unethical Behavior</u>: Cheating or plagiarism may result in <u>at the very least</u> a zero for that work for all parties involved. Repeated cheating will be reported to Student Services for follow-up actions. (See student handbook) Examples of cheating, but not limited to just these:

- \* using email or the network to pass files with answers or code to another student, which is much more than 'working together'
- \* cutting and pasting code or answers written by someone else into a document then passing it off as your own work
- \* taking code from libraries or folders with or without permission of another
- \* retrieving code printouts from the waste basket and using it as your own
- \* downloading code from another student
- \* using instant messaging during an exam or quiz or performance test
- \* extensive collaboration if in doubt, check with the instructor

Computer privileges may be modified or discontinued if they are abused. See STI Student Handbook for current policies.

## ASSESSMENT OF STUDENT LEARNING:

<u>Exams & Quizzes</u> (55% of grade) Exams will be given after major topics. Quizzes may be given unannounced. Test questions may consist of coding, multiple choice, true/false, fill-in-the-blank, logic questions, definitions, short answer, completion, and matching. Some tests may be performance-based. <u>Labs/Database Projects</u> (45% of grade) Lab problems may be individual or team learning exercises, which may involve presentations. Group and individual grades are combined to balance independent work as well as team-oriented exercises.

#### ATTENDANCE POLICY:

Punctuality and good attendance are important. Being tardy or absent has a negative effect on the learning environment and ultimately the employment environment. To better prepare you for employment, this course has expectations that emulate those of a normal job. Students are responsible for monitoring their attendance (posted on STINet).

<u>Tardiness</u> - Tardiness begins the minute class starts, so plan to be on time. We expect that students will have their work done before leaving a lab early.

<u>Absences</u> - Very few employers find excessive absence from a job acceptable. All homework should still be turned in on time. It is the responsibility of the student to contact the instructor and make other arrangements if you cannot turn in your work on time.

Students are encouraged to meet with and email their instructors if they have extenuating circumstances that cause them to be absent for an extended period of time.

# **Grading Scale** (to receive STI credit towards an STI programming degree you must receive a C- or 70%):

A+ 99-100%	B+ 89%	C+ 79%	D + 69%	F = 59% and Below
A 94-98%	B 84-88%	C 74-78%	D 64-68%	
A- 90-93%	B- 80-83%	C- 70-73%	D- 60-63%	

The instructors and the faculty members in this course will act with integrity and strive to engage in equitable verbal and nonverbal behavior with respect to differences arising from age, gender, race, handicapping conditions and religion. If you have special needs as addressed by the American with Disabilities Act and need course materials in alternative formats, notify your instructor immediately. Reasonable efforts will be made to accommodate your special needs. Violations of safety to self and others and/or violation of safe operating practices of equipment may result in: the reduction or loss of your daily grade; removal from class; and/or other disciplinary action.

Student success is important to our faculty, and all faculty are involved in assessing learning. Upon completion of a degree, Southeast graduates will have competence in the following areas:

**Science and Technology:** Technical competence including knowledge of technology and/or scientific principles as these apply to programs.

**Problem Solving & Critical Thinking:** The ability to select and use various approaches to solve a wide variety of problems -- scientific, mathematical, social and personal. Graduates will also be able to evaluate information from a variety of perspectives, analyze data and make appropriate judgments.

**Communication:** The ability to communicate effectively in several forms -- oral, written, nonverbal and interpersonal. Graduates will also demonstrate knowledge of how to manage and access information.

**Professionalism:** Strong work ethic, including responsible attendance; skill in teamwork and collaboration, as well as an ability to work with others, respecting diversity; ability to adapt to change; commitment to lifelong learning; adherence to professional standards; and positive self-esteem and integrity.