

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** ITD 132

**Credits:** 3

**Course Title:** Structured Query Language (T-SQL)

**Course Description:** Incorporates a working introduction to commands, functions, and operators used in SQL for extracting data from standard databases. Provides students with hands-on experience developing code, functions, triggers, and stored procedures for Microsoft SQL Server. Prerequisite: ITD 130 or equivalent. Lecture 3 hours per week.

**General Course Purpose:** ITD 132 is a requirement for the Computer Programmer Career Studies Certificate and the Information Systems Technology AAS - Computer Programmer concentration. It is an IT elective for other students and an option for students who want to continue database skills with Microsoft SQL Server.

**Course Prerequisites and Co-requisites:**

**Prerequisite:** ITD 130 or equivalent

**Student Learning Outcomes:**

Upon completing the course, the student will be able to

- a. Create database tables and views;
- b. Use advanced SQL coding techniques;
- c. Create stored procedures;
- d. Create database functions;
- e. Create database triggers;
- f. Use database transactions;
- g. Create user-defined data types; and
- h. Use XML.

**Major Topics to Be Included:**

- a. Tables and views
- b. Code scripts
- c. Common-table expressions and temporary tables
- d. Using system functions
- e. Stored procedures
- f. System functions
- g. User-defined functions
- h. Triggers
- i. XML

**Date Created/Updated (Month, Day, Year):** August 15, 2018