CIS 294Q Special Topics

I. **CIS 294Q - Special Topics - SQL Server – 3 Semester Hours**

II. **Course Description**
This course allows study of currently relevant computer science topics, with the course being able to be repeated for credit for each different topic covered. Course content will be determined by the instructor and will vary according to the topic being covered. Upon completion, the student will be able to demonstrate knowledge of the course topic through the completion of assignments and appropriate test.

III. **Prerequisite**
CIS 276

IV. **Textbook**
Textbook: Microsoft SQL Server 2005 Implementation and Maintenance (70-431)
Publisher: JOHN WILEY & SONS
Author: Jorden, Joseph L.; Dandy Weyn and Dave Owen.

V. **Course Objectives**
1. The student will be able to install and navigate a SQL server.
2. The student will be able to develop a SQL server database.
3. The student will be able to maintain and monitor a SQL server.

VI. **Course Outline of Topics**
1. The student will be able to install and navigate a SQL server.
   a. The student will be able to install a SQL server.
   b. The student will be able to navigate through a SQL server and understand the different datatypes.
2. The student will be able to develop a SQL server database.
   a. The student will be able create a SQL database.
   b. The student will be able to setup tables inside the database.
   c. The student will be able to perform indexing and full-text searching.
   d. The student will be able to use the different views inside a SQL server.
   e. The student will be able to define constraints.
   f. The student will be able to store procedures.
   g. The student will be able to use triggers and functions.
   h. The student will have an understanding of the different transactions and locks.
   i. The student will be able to move data inside a SQL database
   j. The student will be able to use XML data.
3. The student will be able to maintain and monitor a SQL server.
   a. The student will be able to set permissions.
   b. The student will be able to backup and restore a SQL server.
   c. The student will be able to maintain and automate a SQL server.
   d. The student will be able to monitor and optimize a SQL server.
   e. The student will be able to use high-availability methods inside a SQL server.
   f. The student will have an understanding of a service broker.
   g. The student will be able to set endpoints and replication of a SQL server.

VII. **Evaluation and Assessment**
Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. **Attendance**
Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. **Statement on Discrimination/Harassment**
The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. **Americans with Disabilities**
The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).