Course Title: SQL Server Essentials

Course Description:
As a developer, database administrator, information worker, or decision maker, provide innovative solutions to extract value from corporate data using Microsoft SQL Server 2008 RDBMS features.

Course Prerequisite(s):
Working knowledge of Windows environment; database or programming experience a plus.

Course Objectives:
Install and configure SQL Server; create and manage databases and database devices both in Management Studio and with scripts in Query Editor; backup and restore SQL Server databases; design, create and manage database objects; implement automated tasks and optimize performance of SQL Server.

Textbook(s): Optional
Microsoft SQL Server 2012 Step by Step
Microsoft Press; LeBlanc
ISBN: 0-7356-6386-6

Next Class Possibilities: SQL Server Integration Services

Lesson Plan – by week or session
Session 1:
1. Overview of Microsoft SQL Server
2. Installing and Configuring SQL Server
3. Using the Tools in SQL Server

Session 2:
1. Designing SQL Server databases
2. Creating your first table
3. Building and maintaining indexes

Session 3:
1. Table compression
2. Table partitioning
3. Database snapshots
4. The SELECT statement

Session 4:
1. Advanced data retrieval topics
2. Modifying data
3. Built-in scalar functions

Session 5:
1. Advanced T-SQL topics
2. Views
3. User-defined functions
4. Stored procedures
5. Data manipulation triggers

Session 6:
1. Replication
2. Backups
3. Managing and maintaining indexes and statistics
4. Maintenance plans

Session 7:
1. SQL Server Profiler
2. Extended Events
3. SQL Server security
4. Resource Governor

Session 8:
1. SQL Server Agent
2. Database Mail
3. Data definition triggers
4. Dynamic management objects
5. AlwaysOn
6. Log shipping