## Course Title:
Special Topics: SQL Server Administration

## Date of last update:
(If this syllabus is being changed as part of a course change or new course proposal, enter the date of the proposal)

## Department:
Applied Arts, CIS

## Catalog Course Description:
Introduces students to Microsoft SQL Server. Students will gain practical experience performing database administration tasks using SQL Server. Topics such as installation, maintenance and administration, object security, query analyzer, backup and recovery will be covered.

## Course Objectives & Their Evaluation:
(A broad, content-based statement about what the instructor will attempt to achieve in the course.)

1. Install multiple SQL server instances
2. Create, monitor and manage databases
3. Implement login procedures, database and object security
4. Perform backups and recovery
5. Develop a database maintenance plan
6. Retrieve data using the query analyzer

Students will be evaluated through a variety of measures, including, but not limited to:
1. Hands-on exercises
2. Examinations
3. Homework assignments

## Specific Outcomes:
(Measurable skills students will be expected to demonstrate or specific tasks the student should be able to perform, as evidence that the course content has been mastered.)

1. Utilize the key components of SQL Server
2. Implement a database schema with SQL Server Enterprise Manager
3. Create and manage databases, files and transaction logs
4. Effectively administer SQL Server using Enterprise Manager and Transact-SQL
5. Retrieve and modify data with SQL Tools
6. Replicate data between databases
7. Resolve resource contention problems
8. Utilize SQL server recovery models to backup and restore databases

## Topical Outline:
1. SQL Server Overview
2. Installing and Upgrading SQL Server
<table>
<thead>
<tr>
<th>Suggested Instructional Materials</th>
<th>Including but not limited to:</th>
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</thead>
<tbody>
<tr>
<td>Resources, Equipment, &amp; Special Facilities Required:</td>
<td>SQL Server Administration by Mark Linesenbardt and Shane Stigler</td>
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| 3. Managing Database Files |
| 4. Managing Security |
| 5. Performing Administrative Tasks |
| 6. Backing Up Databases |
| 7. Restoring Databases |
| 8. Monitoring SQL Server Performance |
| 9. Transferring Data |
| 10. Introduction to SQL Server Replication |
| 11. Advanced Replication |
| 12. Maintainance and Troubleshooting with SQL Server |