Semester: Fall 2013

Course Prefix/Number: COP5775

Course Title: Database Administration

Course Credit Hours: 3.0

Course Meeting Times/Places: Online Campus

Instructor and Contact Information:
Dr. Dallas Snider
Office: Building 4, Room 233
E-mail: dsnider@uwf.edu
Tel: 850-473-7348

Office Hours: Tuesday 3:30pm – 5:30pm
Wednesday and Thursday 10:00am – noon
Other days and times by appointment

Course Web Site: http://elearning.uwf.edu/ (login and select COP5775)

Prerequisites or Co-requisites: Database Systems (COP4710 or COP5725).

Course Description:
Database administration skills covering installation, configuration and tuning a database, administering servers and server groups, managing and optimizing schemas, tables, indexes, and views, creating logins, configuring permissions, assigning roles and performing other essential security tasks, backup and recovery strategies, automation and maintenance.

Course Goals:
- Provide students with the opportunity to build upon the knowledge learned in Database Systems (COP4710/COP5725)
- Prepare students for an entry-level database administration position
- Demonstrate to students how to manage database services and clients
- Demonstrate to students how to implement and configure a database environment
- Explain to students best practices for data management
- Demonstrate and apply database optimization, maintenance and recovery procedures
Student Learning Outcomes:
Upon completion of this course the student will be able to:

- properly install, configure and tune a database
- properly administer servers and server groups
- properly manage and optimize schemas, tables, indexes, and views
- properly create logins, configure permissions, assign roles, and perform other essential security tasks
- properly monitor server activity and resolve performance issues
- take charge of automation and maintenance
- plan and implement a comprehensive backup and recovery strategy
- import, export and transform data from various sources
- implement replication and data merging
- manage data publications and subscriptions

About this Course:
This course is delivered completely online. You must have consistent access to the Internet. Learning at a distance may be a very different environment for many of you. You will generally set your own schedules, participate in class activities at your convenience, and work at your own pace.

You may require some additional time online during the first few weeks while you become acclimated to the online format and you may even feel overwhelmed at times. It will get better.

You should be prepared to spend approximately 6 - 8 hours per week online completing lessons, activities, and participating in class discussions. Finally, you may want to incorporate these tips to help you get started:

- Set a time each week (schedule) to:
  - Check eLearning postings to determine your tasks for the week.
  - Check eLearning frequently throughout the week for updates.

- Within the first week, become familiar with eLearning and how to use it.
  - It is a tool to help you learn!

- Ask questions when you need answers.
  - If you have problems, contact your instructor early.

Topics Covered:
Installation, configuration and tuning a database, administering servers and server groups, managing and optimizing schemas, tables, indexes, and views, creating logins, configuring permissions, assigning roles and performing other essential security tasks, backup and recovery strategies, automation and maintenance, importing and exporting and transforming data from various sources, implementing replication and data merging, and managing data publications and subscriptions.

Required texts:
Recommended texts:
ISBN: 0-596-10215-1

Introducing Microsoft SQL Server 2012 by Ross Mistry and Stacia Misner. ISBN: 978-0-7356-6515-6. This is an e-book and I was able to download it for free at the above link.

References:
SQL Server 2012 site: http://www.microsoft.com/sql/default.mspx

Other Required Materials:
Internet Access
E-mail Account

Grading/Evaluation:
This course grade will be determined as follows:
- Homework 25%
- Quizzes 25%
- Mid-term 15%
- Final 15%
- Project 20%

Expectations for Academic Conduct/Plagiarism Policy:
Academic Conduct Policy: (Web Site)
Plagiarism Policy: (Web Site)
Student Handbook: (Web Site)

ASSISTANCE:
Students with special needs who require specific examination-related or other course-related accommodations should contact The Student Disability Resource Center (SDRC), sdr@uwf.edu, (850) 474-2387. SDRS will provide the student with a letter for the instructor that will specify any recommended accommodations.

Communication: You are responsible for checking your e-mail and the eLearning site regularly to keep up with important announcements, assignments, etc. E-mail will be the primary form of communication.

Exams: Makeup exams will NOT be given except with a serious, documented medical or legal excuse. No makeups will be given unless students make advance arrangements. The final exam is comprehensive.

Re-grading Assignments: It is the student’s responsibility to check graded assignments/tests when they are graded. I will gladly re-grade an assignment/test when a question or mistake is brought to my attention. To ensure fairness, I reserve the right to re-grade the entire assignment/test. As a result, your grade may increase, decrease, or remain the same. Grades will not be changed after a week from the date graded assignments/tests is graded.
**Grades:** Final grades will be calculated using a standard grade distribution.

- **November 1st:** The last day of the term for withdrawal from an individual course with an automatic grade of “W”.
- **December 6th:** Deadline for students requesting late withdrawal (W or WF at my discretion) from class, must have the approval of the advisor, instructor, and department chairperson (in that order) and finally, by the Academic Appeals committee. Requests for late withdraws may be approved only for the following reasons (which must be documented):
  1. A death in the immediate family.
  2. Serious illness of the student or an immediate family member.
  3. A situation deemed similar to categories 1 and 2 by all in the approval process.
  4. Withdrawal due to Military Service (*Florida Statute 1004.07*)
  5. National Guard Troops Ordered into Active Service (*Florida Statute 250.482*)
- Requests without documentation will not be accepted. Requests for late withdrawal simply for not succeeding in a course do not meet the criteria for approval and will not be approved.
- Applying for an incomplete or "I" grade will be considered only if: (1) there are extenuating circumstances to warrant it, AND (2) you have a passing grade and have completed at least 70% of the course work, AND (3) approval of the department chair.

**Important Note:** *Any changes to the syllabus or schedule made during the semester take precedence over this version.* Check the eLearning site (or email) regularly for up-to-date information.

**Overall Grading Scale:**

- **A:** 92.5 - 100
- **A-:** 89.5 - 92.499
- **B+:** 86.5 - 89.499
- **B:** 82.5 - 86.499
- **B-:** 79.5 - 82.499
- **C+:** 76.5 - 79.499
- **C:** 72.5 - 76.499
- **C-:** 69.5 - 72.499
- **D+:** 66.5 - 69.499
- **D:** 59.5 - 66.499
- **F:** 0 - 59.499

**Late Policy:**

1. You are expected to complete work on schedule. Deadlines are part of the real world environment you are being prepared for.
2. Documentation of health or family problems may be required.
3. Late assignments will not be accepted.

**Social Media Policy:**

In order to provide fairness and appropriate professional separation between instructor and students, I will not accept social media invitations from students.
Course Schedule
(This is a tentative course schedule -- please check back intermittently for updates)

Note: All the chapter readings are from: "Microsoft SQL Server 2012, Administrator's Pocket Consultant" by William Stanek

<table>
<thead>
<tr>
<th>Module</th>
<th>Week of</th>
<th>Topic</th>
<th>Readings</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 26</td>
<td>Introduction, Installation, SQL Server Management Studio</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Sep 03</td>
<td>Core Database Administration Part 1</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>3</td>
<td>Sep 09</td>
<td>Core Database Administration Part 2</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>4</td>
<td>Sep 16</td>
<td>Managing SQL Server 2012 Security Part 1</td>
<td>Chapter 7</td>
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<tr>
<td>5</td>
<td>Sep 23</td>
<td>Managing SQL Server 2012 Security Part 2</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>6</td>
<td>Sep 30</td>
<td>Manipulating Schemas, Tables, Indexes, and Views</td>
<td>Chapter 8</td>
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<tr>
<td>7</td>
<td>Oct 07</td>
<td>Indices, constraints and partitions</td>
<td>Chapter 9</td>
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<tr>
<td>8</td>
<td>Oct 14</td>
<td><strong>Midterm Exam</strong></td>
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<tr>
<td>9</td>
<td>Oct 21</td>
<td>Replication</td>
<td>Chapter 12</td>
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<tr>
<td>10</td>
<td>Oct 28</td>
<td>Implementing Replication</td>
<td>Chapter 12</td>
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<tr>
<td>11</td>
<td>Nov 04</td>
<td>Back Up and Recovery in SQL Server 2012 Part 1</td>
<td>Chapter 11</td>
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<tr>
<td>12</td>
<td>Nov 11</td>
<td>Back Up and Recovery in SQL Server 2012 Part 2</td>
<td>Chapter 11</td>
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<tr>
<td>13</td>
<td>Nov 18</td>
<td>Database Automation and Maintenance</td>
<td>Chapter 10</td>
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<tr>
<td>14</td>
<td>Nov 25</td>
<td>Database Automation and Maintenance</td>
<td>Chapter 10</td>
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<tr>
<td>15</td>
<td>Dec 02</td>
<td>Review</td>
<td>Final Project due</td>
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<tr>
<td>16</td>
<td>Dec 09</td>
<td><strong>Final Exam (comprehensive)</strong></td>
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Exercises and due dates will be posted as the semester moves along, but it is your responsibility to keep up with the due dates for individual assignments.

Enjoy the class... Dr Snider...