Semester: Fall 2013

Course Prefix/Number: COP6990

Course Title: Data Warehousing

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 Data Warehousing, COP6990)

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

Course Description:
The primary focus of this course is on Data Warehousing and it's applications to business intelligence. We will concentrate on topics like: requirements gathering for data warehousing, data warehouse architecture, dimensional model design for data warehousing, physical database design for data warehousing, extracting, transforming, and loading strategies, introduction to business intelligence, design and development of business intelligence applications, expansion and support of a data warehouse.

Student Learning Outcomes:
Upon successful completion of this course, the student will be able to:
- Gather requirements for data warehousing
- Explain data warehouse architecture
- Design a dimensional model for data warehousing
- Design a physical model for data warehousing
- Comprehend extract, transform and load strategies
- Identify Online Analytical Processing (OLAP) databases
- Design and develop business intelligence applications
- Expand and support a data warehouse

Topics Covered:
What is Data Warehousing, Inmon vs. Kimball, dimensional modeling, slowly changing dimensions, fact tables, OLAP objects, business intelligence, and extract, transform, and load technologies
**Required Textbook(s):**  

**References:**  

SQL Server 2012 Product Documentation:  

Business Intelligence for SQL Server 2012:  

**Tentative grade distribution:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>25%</td>
</tr>
<tr>
<td>Mid-term</td>
<td>15%</td>
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<tr>
<td>Final</td>
<td>15%</td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
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</tbody>
</table>

**Expectations for Academic Conduct/Plagiarism Policy:**

- **Academic Conduct Policy:** ([Web Site](http://www.kimballgroup.com/html/designtips.html))
- **Plagiarism Policy:** ([Web Site](http://www.kimballgroup.com/html/designtips.html))
- **Student Handbook:** ([Web Site](http://www.kimballgroup.com/html/designtips.html))

**Assistance:**

Students with special needs who require specific examination-related or other course-related accommodations should contact the Director of Disabled Student Services (DSS), [dss@uwf.edu](mailto:dss@uwf.edu), (850) 474-2387. DSS will provide the student with a letter for the instructor that will specify any recommended accommodations.

**Attendance:** Attendance is very strongly encouraged. Students are responsible for all announcements and all material covered in class. If you miss a class, you do not have to email me to let me know that you will be absent, just please ask a classmate for notes to determine what you missed.

**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 returned to you. 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 are returned to the class.

**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.

**Participation and Feedback:** I encourage active participation in class. I believe that effective communication between the instructor and students will make the course more useful, interesting, and productive. **Please contact me if you have any questions, concerns, or suggestions! 😊**

**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.

**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. If you have to miss a class, be sure you arrange with another student to find out what you missed at the earliest possible date.
4. Late assignments will not be accepted.
Tentative Course Schedule:

<table>
<thead>
<tr>
<th>WEEK #</th>
<th>WEEK OF</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 26</td>
<td>Chapter 1 – Introduction, What is Data Warehousing?</td>
</tr>
<tr>
<td>2</td>
<td>Sep 03</td>
<td>Chapters 2 and 3 – Data warehousing project management and requirements gathering</td>
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<tr>
<td>3</td>
<td>Sep 09</td>
<td>Chapters 4 and 5 – Technical architecture</td>
</tr>
<tr>
<td>4</td>
<td>Sep 16</td>
<td>Chapter 6 – Dimensional Modeling Part 1</td>
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<tr>
<td>5</td>
<td>Sep 23</td>
<td>Chapter 7 – Dimensional Modeling Part 2</td>
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<tr>
<td>6</td>
<td>Sep 30</td>
<td>Chapter 8 – Physical Database Model Part 1</td>
</tr>
<tr>
<td>7</td>
<td>Oct 07</td>
<td>Chapter 9 – Physical Database Model Part 2, Extract, Transform and Load</td>
</tr>
<tr>
<td>8</td>
<td>Oct 14</td>
<td>Midterm Exam</td>
</tr>
<tr>
<td>9</td>
<td>Oct 21</td>
<td>Chapter 10 – Extract, Transform, and Load continued</td>
</tr>
<tr>
<td>10</td>
<td>Oct 28</td>
<td>Chapter 11 – OLAP and Business Intelligence Part 1</td>
</tr>
<tr>
<td>11</td>
<td>Nov 04</td>
<td>Chapter 12 – OLAP and Business Intelligence Part 2</td>
</tr>
<tr>
<td>12</td>
<td>Nov 11</td>
<td>Chapter 13 and 14 – Deployment, support and expansion of the data warehouse system</td>
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<tr>
<td>13</td>
<td>Nov 18</td>
<td>Work on Project</td>
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<tr>
<td>14</td>
<td>Nov 25</td>
<td>Work on Project</td>
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<tr>
<td>15</td>
<td>Dec 02</td>
<td>Complete Project/Review</td>
</tr>
<tr>
<td>16</td>
<td>Dec 09</td>
<td>Final Exam (comprehensive)</td>
</tr>
</tbody>
</table>

**Important Note:** Assignments will be assigned throughout the semester. Due dates for assignments will be given in class. Also, there is a major project in this class. The project will be a semester project that will have many parts. As the semester progresses, I will give you milestones when each part of the project will be due. Students are expected to do all parts of the project and all parts of the project will receive a grade (adding to up 30% in the end).

Also, tests and quizzes will be announced as the semester progresses.

Note for graduate students: Graduate students will be assigned additional work – please get in touch with the instructor (by the end of the 3rd week) if you are a graduate student. Enjoy the semester...

Dr Snider