COURSE SYLLABUS

Semester: Spring 2013

Course Prefix/Number: COP4710

Course Title: Database Systems

Course Credit Hours: 3.0

Course Meeting Times/Places: Online Campus

Instructor and Contact Information:
Paul Brown
E-mail: pbrown@uwf.edu
Tel: 850-324-5893

Office Hours: By appointment only.

Course Web Site: http://eLearning.uwf.edu/ (login and select COP4710)

Prerequisites or Co-requisites: Any programming course.

Course Description:
This course is an introduction to database systems and database management system architectures. Various database models are discussed with an emphasis on the relational model and relational database design. Case applications using SQL are included.

Student Learning Outcomes:
Upon completion of this course, the student will be able to:
- Understand the uses of using a database system
- Understand the differences between relational/hierarchical/network databases
- Understand and develop a database using a relational data model
- Develop ER and Enhanced ER (EER) models
- Map ER and EER to relational tables
- Reverse engineer a database
- Develop a normalized database
- Create and develop SQL queries using joins, views, derived tables, sorting, aggregation, and nested sub-queries

Topics Covered:
Topics covered include, but are not limited to, Characteristics of the Database approach, Database Systems Concepts and Architectures, Conceptual Database Design, Data Modeling Using Entity-Relationship Models, Enhanced Entity-Relationship and UML Modeling, The Relational Data Model and Relational Database Constraints, Relational Algebra and Tuple relational Calculus, Relational Database Design by ER and EER-to-Relational Mapping, Functional Dependencies, Normalization for Relational Databases, SQL – expressive power of SQL, joins, views, derived tables, sorting, aggregation, nested sub-queries, query optimization.
Required Textbook(s):


References:

Oracle’s site: [http://www.oracle.com](http://www.oracle.com)
Database download site: [http://www.cs.uwf.edu/~sbagui/](http://www.cs.uwf.edu/~sbagui/)

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 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 days 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 more than 8 – 10 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 at least twice a week (schedule) to:
  - Check eLearning postings to determine your tasks.
  - 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.

Grading:

- SQL Homework: 30%
- ER Homework: 30%
- Exams: 25%
- Final Project: 15%

Technology Requirements:

All programming assignments and the project will require using Oracle on the Linux/Unix environment. You will be given instructions on getting started with Oracle on the Linux/Unix environment.

Expectations for Academic Conduct/Plagiarism Policy:
Academic Conduct Policy: [Web Format] | [PDF Format] | [RTF Format]
Plagiarism Policy: [Word Format] | [PDF Format] | [RTF Format]
Student Handbook: [PDF Format]

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

Other Course Policies:

Class material and due dates: Students are responsible for all announcements and all material presented. Students are expected to keep up with due dates and submit all assignments and work into the eLearning dropbox before the due date.

Communication: You are responsible for checking your e-mail and the eLearning site regularly, preferably once a day, to keep up with important announcements, assignments, etc.

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 one week from the date graded assignments/tests are returned to the class.

Grades: Final grades will be calculated using a standard grade distribution. The last day of the term for withdrawal from an individual course with an automatic grade of "W" is March 16th. Students requesting late withdrawal (W or WF) from class must have the approval of the advisor, instructor, and the department chairperson (in that order) and finally by the Academic Appeals committee. Requests for late withdrawals 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 and regular feedback. 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!

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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92-100</td>
</tr>
<tr>
<td>A-</td>
<td>89-92</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>82-87</td>
</tr>
<tr>
<td>B-</td>
<td>79-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>72-77</td>
</tr>
<tr>
<td>C-</td>
<td>69-72</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>D</td>
<td>59-67</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

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.
4. Due to the amount of work already scheduled for this class there are no makeup or extra credit assignments so stay on track as catching up can prove difficult due to the technical nature of this course.