Webster UNIVERSITY WORLDWIDE	**The School of Business & Technology Kennedy Space Center Course Syllabus**

Course	COSC 5040 Distributed Database Design
Term	Summer 2008
Instructor	Name: Carl Delaune Phone: 321-867-4245 Email: cdelaune2001@yahoo.com
Catalog Description	Students will study the principles of homogeneous database technology and the principles of distributed database systems. The emphasis will be on the integration of heterogeneous database management systems into a coherent system. Students will learn to design logical databases.
Prerequisites	COSC 5000
Course Level Learning Outcomes	At the completion of this course students will be able to: • Explain the fundamental concepts necessary for designing, using, and implementing database systems. • Describe the attributes and differences in the various database design models. • State the elements of database organization and structure. • Explain the relational database design model. • Demonstrate database query concepts using SQL. • Apply the principals of data normalization • Design and document a database system.
Materials	**REQUIRED TEXTS:** Fundamentals of Database Systems, 5th Edition, Elmasri, Addison-Wesley, ISBN: 9780321369574 or 0-321-36957-2 Firebird database management system, which may be downloaded from www.firebirdsql.org **SUGGESTED SUPPLEMENTAL READINGS:** NONE
Grading	<table><tr><th>COURSE REQUIREMENTS:</th><th>% OF GRADE</th></tr><tr><td>**a. Mid-term Exam**</td><td>**15%**</td></tr><tr><td>**b. Final Exam**</td><td>**35%**</td></tr><tr><td>**c. Homework**</td><td>**50%**</td></tr></table> Taking the numerical score from the formula above and converting it to the appropriate letter grade from the chart determine the student's letter grading for the course.

	<table><tr><th>Letter Grade</th><th>Numerical Score</th></tr><tr><td>A</td><td>96-100% (4.0)</td></tr><tr><td>A-</td><td>91-95% (3.67)</td></tr><tr><td>B+</td><td>87-90% (3.33)</td></tr><tr><td>B</td><td>82-86% (3.0)</td></tr><tr><td>B-</td><td>78-81% (2.67)</td></tr><tr><td>C</td><td>70-77% (2.0)</td></tr><tr><td>F</td><td>69 & below (0)</td></tr><tr><td>I</td><td>Incomplete (0)</td></tr><tr><td>W</td><td>Withdrew</td></tr></table>
Activities	• Lectures, • Demonstrations • Lab exercises
Policy Statements: **University Policies**	University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest: **Academic Honesty** The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it. **Drops and Withdrawals** Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund. **Special Services** If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.

	Disturbances Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course. **Student Assignments Retained** From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project. **Contact Hours for this Course** It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.
Course Policies	Attendance at all class sessions is expected. • Late weekly assignments will not be accepted. Attendance and participation are required. Students with 2 absences are advised to withdraw from the course. Please notify the instructor as soon as possible regarding absences. • It is the student's responsibility to obtain materials for class time missed. It is a good idea to obtain notes from other students for class time missed. • The last day to drop the course with a full refund is Friday of Week 2. The last day to withdraw from the course, without a refund, is Friday of Week 6. • All work is due at the beginning of class and becomes the property of the department. Any work turned in after that will be considered late and the grade will be reduced by 10 percent per day late. • Any student caught cheating or committing plagiarism might fail the class and be subject to further disciplinary action.
Week 1 Schedule	**PREPARATION FOR CLASS:** Introduction and Course overview. Install Firebird; Textbook chapters 1 and 2

	CLASSROOM DISCUSSION TOPICS: DBMS overview; building a database; running Firebird
Week 2 Schedule	**PREPARATION FOR CLASS:** Textbook chapter 7 **CLASSROOM DISCUSSION TOPICS:** The relational model; relational algebra
Week 3 Schedule	**PREPARATION FOR CLASS:** Textbook chapter 8 **CLASSROOM DISCUSSION TOPICS:** Introduction to SQL queries
Week 4 Schedule	**PREPARATION FOR CLASS:** Study for Midterm Exam, Textbook chapters 1, 2, 7 and 8 **CLASSROOM DISCUSSION TOPICS:** Advanced SQL queries, views **Midterm Exam**
Week 5 Schedule	**PREPARATION FOR CLASS** Textbook chapters 5 and 6 **CLASSROOM DISCUSSION TOPICS:** Data structures for databases – how a dbms builds a database
Week 6 Schedule	**PREPARATION FOR CLASS:** Textbook chapters 18 **CLASSROOM DISCUSSION TOPICS:** Query processing and query optimization
Week 7 Schedule	**PREPARATION FOR CLASS:** Textbook chapters 3 and 9 **CLASSROOM DISCUSSION TOPICS:** The Entity - Relationship model; synthesis method of database design
Week 8 Schedule	**PREPARATION FOR CLASS:** Textbook Chapter 14 **CLASSROOM DISCUSSION TOPICS:** Normalization; The decomposition method of database design
Week 9 Schedule	**PREPARATION FOR CLASS:** Study for final exam **CLASSROOM DISCUSSION TOPICS:** Final Exam

PURCHASING TEXTBOOKS--Most textbooks can be purchased through **MBS Direct**. Check the syllabus for textbook information. Give MBS Direct the campus location (for the purpose of ordering books the campus is **Space Coast Campus**, course name, number and section number (i.e. Space Coast Campus, COMP5000/64) and most important, the **title, author, edition, and ISBN** of the book you are ordering. MBS Direct will buy back your book at the end of the term should you elect not to retain it as a reference book. Order by phone or online. Orders should be placed no earlier than 4 weeks prior to the start of the term.

MBS Direct: 1-800-325-3252

MBS Direct Website: www.mbsdirect.net/webster
Monday-Thursday, 7am-10pm (Central Time)
Friday, 7am-6pm (Central Time)
Saturday, 8am-5pm (Central Time)
Sunday, noon-4pm (Central Time)

In order to meet the course objectives this syllabus may be modified at the discretion of the instructor without approval of the students.

Original approved by:
Dr. Calvin D. Fowler Academic Dean Space Coast Region, May, 5 2008