Advanced Database (ITSW 2337)

Credit: 3 semester credit hours (3 hours lecture, 0 hours lab)

Prerequisite/Co-requisite: ITSW 1307, with a grade of "C" or better.

Course Description
Advanced concepts of database design and functionality.

Required Textbook and Materials
1. *Microsoft Office Access 2007: Comprehensive Concepts and Techniques ,* by: Shelly, Cashman & Quasney 1st Edition

    a. ISBN number is 9781418843410.

2. USB Flash Memory drive.

3. Access to Access 2007

Course Objectives
Upon completion of this course, the student will be able to:

1. Explain relational database theory. (SCANS: C7, C8, F1, F5)

2. Collect and distribute data. (SCANS: C6, C7, C8, F9)

3. Analyze data. (SCANS: C7, C8, F12)

4. Perform complex queries, data validation, and table relationships. (SCANS: C7, C8, F2, F12)

SCANS Skills and Competencies
Beginning in the late 1980's, the U.S. Department of Labor **S**ecretary's **C**ommission on **A**chieving **N**ecessary **S**kills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies.

Course Outline

A. Using Macros, Switchboards, PivotTables, and PivotCharts
1. Creating and Using Macros
2. Creating and Using Switchboard
3. Additional Tables
4. PivotTables and PivotCharts

B. SQL Feature
1. SQL Background
2. SQL Queries
3. Sorting
4. Grouping
5. Joining Tables

C. Advanced Report Techniques
1. Creating Reports in Design View

Approved 11/2010

2.	Mailing Labels	4.	Special Field Properties

D. Advanced Form Techniques
   1. Creating a Form with Combo Boxes
   2. Creating a Multi-Page Form

F. Web-Feature
   1. SharePoint Services
   2. Hyperlinks and HTML

E. Administering a Database System
   1. Microsoft Access Tools
   2. Navigation Pane
   3. Table and Database Properties

Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

1.	Daily work	40%
2.	Applications Exams	30%
3.	Final	30%

Course Requirements

1. Create and modify databases using Access 2007.

2. Purchase required materials including book and USB flash memory drive.

3. Use Blackboard to submit all assignments.

4. The final is passing the Access Microsoft Certified Application Specialist (MCAS) exam. This exam will have to be scheduled in the Testing Center before the end of the semester. Please submit certificate with score for grade. If you do not pass the MCAS you will be given an INCOMPLETE. **Please refer to LIT school catalog for the incomplete policy.**

Course Policies

1. No food, drinks, or use of tobacco products in class.

2. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.

3. Do not bring children to class.

4. No late assignments will be accepted.

5. Tests. Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.

6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.

7. Exams will be closed book/note and will test information in assigned chapters and material discussed in class. Any student being disruptive during an exam will be required to terminate their exam and leave the classroom.

8. Grades will be posted under the My Grades icon on the Blackboard class web site.

9. If you need to contact the instructor, you may leave a voice mail or e-mail in Blackboard or the instructor's LIT e-mail (preferred). Your call or e-mail will be answered within 24 hours Monday – Thursday and within 72 hours Friday - Sunday. If leaving a voice mail, be sure to leave a phone number that can be understood.

10. All assignments will be completed using Blackboard. Assignment may NOT be submitted via email. All due dates will be posted on the Blackboard.

11. The textbook (and all items included ISBN bundle number) and the flash drive are mandatory. A student not acquiring these mandatory materials will not be able to PASS this course.

12. Data files can be located on the CD provided with the textbook or on the publisher's resource website.

13. Tests and a Final exam will be taken during the semester. DO NOT miss any exams. Makeup exams will not be given unless you make arrangements in advance with the instructor.

14. Attendance: students should be present and punctual for all classes. If tardy, enter quietly and do not disturb the class. Regular class attendance will maximize your computer skills for your personal and professional future. If you are taking the course via the Web, submission of assignments by the due date is a measure of attendance. Students that are tardy or miss a class are responsible for all work and/or discussion missed. The student is responsible to obtain missed material from a classmate. **Do not expect your instructor to repeat a lecture.**

15. Do not talk, type, or print while the instructor is talking to the class or when a student is asking a question that pertains to the class.

16. Refrain from "surfing" the Web during class, unless directed by your instructor.

17. Additional class policies as defined by the individual course instructor.

18. A grade of "C" or better must be earned in this course for credit toward degree requirement.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

Refer to Blackboard for actual assignments and due date

Week of	Topic	Reference
Week 1	Course introduction and policies, Blackboard, Database Review	pp. 233-295
Week 2	Database Review	pp. 297-357
Week 3	Access Chapter 6: Macros, Switchboards, PivotTables, PivotCharts	pp. 361-422
Week 4	Access Chapter 6: Macros, Switchboards, PivotTables, PivotCharts	pp. 361-422
Week 5	SQL Feature	pp. 425-455
Week 6	SQL Feature	pp. 425-455
Week 7	Access Chapter 7: Advanced Report Techniques	pp. 457-519
Week 8	Access Chapter 7: Advanced Report Techniques	pp. 457-519
Week 9	Exam One	
Week 10	Access Chapter 8: Advanced Form Techniques	pp. 521-599
Week 11	Access Chapter 8: Advanced Form Techniques	pp. 521-599
Week 12	Access Chapter 9:dministering a Database System	pp. 601-671
Week 13	Access Chapter 9:dministering a Database System	pp. 601-671
Week 14	Exam Two	
Week 15	Web Feature	pp. 673-693
Week 16	Review/Final Exam	