Introduction to Database (ITSE 1307)

Credit: 3 semester credit hours (2 hours lecture, 2 hours lab)

Prerequisite/Co-requisite: None

Course Description

Introduction to database theory and the practical applications of a database.

Required Textbook and Materials

- 1. Microsoft® Access 2013 Complete, 1st Edition: Cable & Evans
 - a. ISBN: 9781285169071
- 2. USB Flash Memory drive
- Microsoft Access 2013

Course Objectives

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

- 1. Use object-oriented programming (OOP) techniques.
- 2. Plan, define, and design a database
- 3. Design and generate tables, forms, and reports.
- 4. Devise and process queries.

Course Outline

- A. Microsoft Access Basics
 - Database Basics
 - Opening a Database
 - Editing A Database
 - Layouts
- B. Creating A Database
 - Creating a Database
 - Saving a Table
 - Designing a Table
- C. Creating Queries
 - Query Creation
 - Sorting Data
 - Filtering Data
 - Table Relationships
 - Multi-Query Table
 - Conditions
 - Data Calculation
- D. Creating & Modifying Forms
 - Creating a Form

- Find & Replace Data
- Update & Delete Data
- Form Layouts
- E. Creating & Modifying Reports
 - Report Tool
 - Label Wizard
 - Report Wizard
 - Layout & Design View
- F. Integrating Access
 - Importing & Exporting Data
 - Importing & Exporting Documents
 - Workbooks
 - Form Letters
- G. Enhancing Table Design
 - Input Mask
 - Validation Rules
 - Lookup Properties
 - Field Values
 - Calculated Lookup Fields

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Course Syllabi

- H. Advanced Queries
 - Parameter Query
 - Action Query
 - Append Query
 - Update Query
 - Crosstab Query
- I. Advanced Form Features
 - Consistent Form Design
 - Form Themes
 - Combo Boxes
 - Calculated Controls
- J. Advanced Reports Features
 - Parameter Query Reports
 - Themes for Reports
 - Control Properties
 - Calculated Controls
 - Subreports
- K. Creating & Running Macros
 - Understanding Macros
 - Macro Security

- Macro Creations
- Running Macros
- Editing Macros
- Multi-Action Macros
- Embedded Macros
- L. Automating Database Processes
 - Splash Screens
 - AutoExec Macros
 - Navigation Forms
 - Startup Options
- M. Programming in Access
 - Creating Functions
 - Named Controls
 - IF procedures
 - Else Statements
- N. Database Security
 - Exclusive Mode
 - Encrypted Data
 - Backup Copies

Grade Scale

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

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Daily Assignments	35%
2. Homework	35%
3. Quizzes & Test	30%

Course Requirements

- 1. Identify database terminology and concepts
- 2. Plan, define, and design a database
- 3. Design and generate tables, forms, and reports
- 4. Devise and process queries

Course Policies

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

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- 2. Cellphones, MP3 players, notebook/netbook(s) 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. Any assignment submitted after the Blackboard cut-off time will result in a '0'.
- 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. A grade of 'C' or better must be earned in this course for credit toward degree requirement
- 8. All assignments will be completed using Blackboard. Assignment may not be submitted via email.
- 9. **Attendance**: Students should be present and punctual for all classes. Any assignment missed due to absence will result in a zero.
- 10. **Tardiness**: If tardy, enter quietly and do not disturb the class. 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 & do not interrupt your instructor.**
- 11. 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.
- 12. Refrain from "surfing" the Web during class, unless directed by your instructor.

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	Microsoft Access Basics	Chapter 1
Week 2	Creating A Database	Chapter 2
Week 3	Creating Queries	Chapter 3
Week 4	Creating & Modifying Forms Test 1	Chapter 4 Chapters 1 - 4

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Week of	Topic	Reference
Week 5	Creating & Modifying Reports	Chapter 5
Week 6	Integrating Access	Chapter 6
Week 7	Enhancing Table Design	Chapter 7
Week 8	Advanced Queries Test 2	Chapter 8 Chapters 5 – 8
Week 9	Advanced Form Features	Chapter 9
Week 10	Advanced Reports Features	Chapter 10
Week 11	Creating & Running Macros	Chapter 11
Week 12	Automating Database Processes Test 3	Chapter 12 Chapters 9 - 12
Week 13	Programming in Access	Chapter 13
Week 14	Database Security Test 4	Chapter 14 Chapters 13 - 14
Week 15	Final Project	Chapters 1 – 14
Week 16	Final	Chapters 1 - 14

Contact Information:

Varies by Instructor