(CIS 113) Data Management

(Abbreviated copy for student challenge exam review)

COURSE DESCRIPTION: This is a comprehensive course in the use and application of computers using databases. The course covers all aspects of database design including entity relationship modeling, tables, reports, queries, forms and other database objects. In addition, students will gain a comprehensive understanding of database applications and some experience using Structured Query Language (SQL). It is highly recommended that students taking this course have MS Access© skills.

4 credits; 3 lecture hours; 2 lab hours
Prerequisites: CIS 110 Computer Applications or CTN 110 Introduction to Information Technology
Electives: Satisfies Technology, Computer, Free
Proficiencies: None

REQUIRED TEXT AND MATERIALS:

- *GO! With Microsoft Access 2013 Comprehensive* by Gaskin, McLellan and *Graviett* ©2014, published by Pearson Education, Inc.
- ISBN 9781269603324

COURSE OBJECTIVES & OUTCOMES: This course builds students' intermediate-to-advanced skills in Access 2013 and the integration of other software applications, and helps develop critical thinking and decision-making skills. This course is a case-based, certification approach and it aligns to Microsoft Office Specialist Objectives. Upon successful completion of this course the student's will:

- Design the Structure of Table: Design tables and Fields for a new Database, restrict data entry and data display using field properties, work with long text data type fields, and create an attachment data type field and attaching files to records.
- Build Relationships and Lookup Fields: Build relationships, define a multiple-field primary key,
- Create a field to look up values in another table, create a field that allows multiple values, create indexes, and normalize a database.
- Utilize Advanced Query Techniques: Extract records using select queries, modify join properties I a query, create and use subqueries, use conditional logic, select record using a multiple-value field and perform operations using action queries.
- Create and Use Custom Forms: Create custom forms using design view, add calculations to a form in design view, adjust objects for consistency in appearance, add graphics to a form in design view, anchor controls to a form, create a datasheet form and restrict form actions, create a form using the blank form tool and sort and find records in forms.
- Create and Use Custom Reports: Create custom reports using design view, add page numbers and date and time controls to a report, add graphics to a report, group records and add functions and a calculated field in a report, modify section properties, keep a group together on the same page, insert and edit a chart in a report, and create a report using the blank report tool.
- Use Access Tools and Manage Objects: Create a new database using a template, save a database as a template, create objects using an application parts template, set form control defaults and create a user-defined form template, copy a table structure to create a new table, modify a table using the table analyzer wizard, optimize performance using the performance analyzer, split a

database, document a database, rename and delete objects, and create databases using template, application parts, quick starts, and wizards.

- Automate, Customize, and Secure Access: Create a macro, edit and delete a macro, create a command button to run a macro, view an embedded macro, create a navigation form, customize the Access environment, and customize the ribbon.
- Integrate Access Data: Create and restore a backup file, create an ACCDE database file, view trust center settings for Access, import and merge data from another Access database, link to a table in another Access database, import from to Access from a text file, save and repeat import specifications, export Access data to a text file, save and repeat export specifications, publish and view database objects as XPS document and create a database in an older format.
- Create forms with subforms with calculated fields and buttons.

OUTCOMES: Students will have the opportunity to develop knowledge and/or skills concerning the ability to:

- Create database tables to organize business or personal records
- Modify an manage tables to ensure that data is accurate and up-to-date
- Perform Queries to assist with decision making
- Plan, research, create, revise and publish database information to meet specific communication needs
- Given a workplace scenario requiring the reporting and analysis of data, assess the information requirements and then prepare the materials that achieve the goal efficiently and effectively

ORAL COMMUNICATION INTENSIVE COURSE DESIGNATION: Students will develop and express ideas by applying the tools of discussion, debate, research and inquiry.

Objectives: They will demonstrate the capacity to listen, speak, read, and write with increasing complexity and sophistication, attending both to purpose and to diversity of audiences, and to communicate their ideas using appropriate oral, written, visual, or technological means.

LEARNING OUTCOMES: Students will have the opportunity to develop knowledge and/or skills concerning the ability to:

- Conduct an audience analysis and customize a speech with a clear message and appropriate language that will meet audience needs.
- Compose and deliver a speech with an effective introduction, appropriate support and conclusion.
- Deliver a presentation confidently, with appropriate posture, enunciation, pace, gestures and demeanor.
- Use visual aids as part of a presentation, including appropriate technologies.

GLOBAL AWARENESS INTENSIVE COURSE DESIGNATION: Global Awareness: Students will develop an understanding of diverse cultures.

Objectives: Students will develop a keen sense of understanding historical traditions in today's world. They will learn to use this knowledge to address increasingly interdependent global issues such as the environment and human rights.

LEARNING OUTCOMES: Students will have the opportunity to develop knowledge and/or skills concerning the ability to:

- Identify own cultural rules and biases
- Explain the values, norms, and social processes of some non-U.S. cultures.
- Articulate some examples of the complex interdependence among nations or cultures.
- Compare the U.S. to some non- U.S. cultures by analyzing some cultural elements.

- Demonstrate an understanding of some important global issues and the perspectives of non-
- U.S. cultures
- Display curiosity and openness toward culturally different others.