

CIS 113 - Database Management

4 credits

Prerequisites: CIS 110 Computer Applications

Electives: Satisfies Technology, Computer, Free

Proficiencies: None

COURSE DESCRIPTION: This course will focus on data management using spreadsheet and database software. Practical applications and projects will be assigned that will focus on decision-making, querying, graphs and creating customized forms and reports.

COURSE OBJECTIVES: The purpose of this course is to develop an in-depth understanding and practical knowledge of the most frequently used database management software applications and to enable the students to effectively use a personal computer in the home or on the job. Laboratory assignments will give the student practical applications in using an electronic spreadsheet, a database manager, and when a word-processor would be used to pull the information all together.

Upon successful completion of this course the students will:

Demonstrate an advanced skill level with electronic spreadsheets with Microsoft Excel:

- Create advanced worksheets, chart data, construct formulas, use the SUM function, format date, cells and worksheets, insert footers, and print formulas.
- Use multiple worksheets and workbooks, enter series, work with ranges, copy and paste formulas and data, format multiple worksheets and workbooks, create relative and absolute references, find and replace text, hide and unhide columns, conduct what if analysis and use statistical functions.
- Work with IF functions and large worksheets, link data in worksheets, create IF functions that return text, use conditional formatting to emphasize data, format with themes, apply number formats and control print options.
- Create charts and tables, sort and filter data, modify charts, apply a theme to a chart, print charts, sort data, convert text into columns, apply conditional formatting using data bars and color scales and insert a table and filter data.
- Make decisions with functions, create text functions, create statistical functions, enter date and time functions, create logical functions and insert a comment, insert financial functions, create what-if-analysis with goal seek and determine future value and present value.
- Use named ranges, templates, lookup values and 3-D references, create formulas using named ranges, utilize lookup lists, customize and use Microsoft-created templates, transpose data in a worksheet and apply cell styles, Use 3-D references to link data in worksheets and workbooks and create a workspace, and create hyperlinks.

Demonstrate an advanced skill level with database management software with Microsoft Access

- Create a database table using a template, modify a template table, find, modify, and print records, create a new database and a table, modify the table design and format a table for printing.
- Sort, Filter and Query a database, open and rename an existing database, sort records, filter records, open, edit, sort and print an existing query, create table relationships and a simple query, create a select query, specify criteria in a query and specify compound criteria in a query.
- Create a form and report, add, delete, edit and print records in a form, modify the design of a form in layout view, modify the design of a form in design view, create a report, modify the design of a report in layout view, modify the design of a report in design view and keep grouped records together and print a report.
- Enhance tables, modify existing tables, customize the navigation pane, create and modify table relationships, enter records using a sub-datasheet, change data types, set field properties, create data validation rules and validation text, create a lookup field and attach files to records.
- Enhance queries, create calculated fields, use aggregate functions, create a crosstab query, find duplicate and unmatched records, create a parameter query, create a make table query, create an append query, create a delete query, create an update query and modify the join type.
- Customize forms and reports, create a form in design view, change and add controls, format a form, make a form user friendly, create a report in design view, add controls to a report, group, sort, and total records in design view and create a crosstab report.

REFERENCE MATERIALS:

GO! with Microsoft Office 2010 Volume 1 [Spiral-bound] Shelley Gaskin (Author), Robert L. Ferrett (Author), Alicia Vargas (Author), Carolyn E. McLellan (Author)

ISBN-13: 978-0132454469 | Publisher: Pearson Publication Date: July 3, 2010

Office 2010 (Marquee Series) [Spiral-bound] Rutkosky; Sequin; Rutkosky (Author)

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