



CIS 110 Computer Applications

(Abbreviated copy for student challenge exam review)

COURSE DESCRIPTION: This course will focus on the effective use of the computer at home or on the job. Topics will include an introduction to application software for presentation graphics, electronic spreadsheet, and database management software. It also expands upon the student's knowledge of word processing and the operating system.

3 credits; 2 lecture hours; 2 lab hours

Electives: Satisfies Technology Elective, Technical Elective & Open Elective

Proficiencies: None

REQUIRED TEXT AND MATERIALS:

- *Go! with Microsoft Office 2013 Volume 1* by Gaskin, Vargas & McLellan. ©2013, published by Pearson Publishing, Inc. ISBN 9781269603119

COURSE OBJECTIVES & OUTCOMES: This course focuses on today's mobile worker wherever, whenever, and from whatever device. It covers Web Apps, Office 365 collaboration, and touch devices, so students are prepared to work in any environment. And, for those who want to go beyond the classroom and become certified, GO! Provides clear MOS preparation guidelines so students know what is needed to ace the Core exam! Upon successful completion of this course the student's will:

Chapter 1 Creating documents with Microsoft Word 2013

- **Objectives:** Create a New Document and Insert Text, Insert and Format , Graphics, Insert and Modify Text Boxes and Shapes, Preview and Print a Document, Change Document and Paragraph Layout, Create and Modify Lists, Modify Tab Stops, Insert a SmartArt Graphic and an Online Video
- **Outcomes:** Create a flyer with a picture. Format text, paragraphs, and documents.

Chapter 2 Using Tables and Templates to Create Resumes and Cover Letters

- **Objectives:** Create a Table, Format a Table, Present a Word Document Online, Create a Custom Word Template, Correct and Reorganize Text Use the Proofing Options and Print an Envelope, Create a Document Using a Predesigned Microsoft Template
- **Outcomes:** Write a resume by using a Word table & Write a cover letter and use a template to create a cover sheet

Chapter 3 Creating Research Papers, Newsletters, and Merged Mailing Labels

- **Objectives:** Create a Research Paper, Insert Footnotes in a Research Paper, Create Citations and a Bibliography in a Research Paper, Use Read Mode and PDF Reflow, Format a Multiple-Column Newsletter , Use Special Character and Paragraph Formatting, Create Mailing Labels Using Mail Merge
- **Outcomes:** Create a research paper that includes citations and a bibliography & Create a multiple-column newsletter and merged mailing labels.

Chapter 1 Getting Started with Microsoft Excel

- ❏ **Objectives:** Create, Save, and Navigate an Excel Workbook, Enter Data in a Worksheet, Construct and Copy Formulas and Use the SUM Function, Format Cells with Merge & Center, Cell Styles, and Themes, Chart Data to Create a column Chart and Insert Sparklines, Print a Worksheet, Display Formulas, and Close Excel, Check Spelling in a Worksheet, Enter Data by Range, Construct Formulas for Mathematical Operations, Edit Values in a Worksheet
- ❏ **Outcomes:** Create a sales report with an embedded column chart and sparklines & Calculate the value of an inventory.

Chapter 2 Using Functions, Creating Tables, and Managing Large Workbooks

- ❏ **Objectives:** Use Flash Fill and the Sum, Average, Median, Min, and Max Functions, Move Data, Resolve Error Messages, and Rotate Text, Use COUNTIF and IF Functions and Apply Conditional Formatting, Use Date & Time Functions and Freeze Panes, Create, Sort, and Filter an Excel Table, View, Format, and Print a Large Worksheet, Navigate a Workbook and Rename Worksheets, Enter Dates, Clear Contents, and Clear Formats, Copy and Paste by Using the Paste Options Gallery, Edit and Format Multiple Worksheets at the Same Time, Create a Summary Sheet with Column, Sparklines, Format and Print Multiple Worksheets in a Workbook
- ❏ **Outcomes:** Analyze inventory by applying statistical and logical calculations to data and by sorting and filtering data & Summarize the data on multiple worksheets.

Chapter 3 Analyzing Data with Pie Charts, Line Charts, and What-if Analysis Tools

- ❏ **Objectives:** Chart Data with a Pie Chart, Format a Pie Chart, Edit a Workbook and Update a Chart, Use Goal Seek to Perform What-If Analysis, Design a Worksheet for What-If Analysis, Answer What-If Questions by hanging Values in a Worksheet, Chart Data with a Line Chart
- ❏ **Outcomes:** Present fund data in a pie chart & Make projections by using what-if analysis and present projections in a line chart.

Chapter 1 Getting Started with Microsoft Access 2013

- ❏ **Objectives:** Identify Good Database Design, Create a Table and Define Fields in a Blank Desktop Database, Change the Structure of Tables and Add a Second Table, Create a Query, Form, and Report 51, Import Excel Spreadsheets into Access, Save to SkyDrive, Use a Template to Create a Database, Organize Objects in the Navigation Pane, Create a New Table in a Database Created with a Template, Print a Report and a Table
- ❏ **Outcomes:** Create a new database & Create a database from a template.

Chapter 2 Sort and Query a Database

- ❏ **Objectives:** Open and Save an Existing Database, Create Table Relationships, Sort Records in a Table, Create a Query in Design View, Create a New Query from an Existing Query, Sort Query Results, Specify Criteria in a Query, Specify Numeric Criteria in a Query, Use Compound Criteria in a Query, Create a Query Based on More Than One Table, Use Wildcards in a Query, Create Calculated Fields in a Query, Calculate Statistics and Group Data in a Query, Create a Crosstab Query, Create a Parameter Query
- ❏ **Outcomes:** Sort and query a database & Create complex queries.

Chapter 3 Forms, Filters and Reports

- ❏ **Objectives:** Create and Use a Form to Add and Delete Records, Filter Records, Create a Form by Using the Form Wizard, Modify a Form in Layout View and in Design View, Create a

Report by Using the Report Tool and Modify the Report in Layout View, Create a Report by Using the Report Wizard, Modify the Design of a Report, Keep Grouped Data Together in a Printed Report

- **Outcomes:** Create forms to enter and delete records and to display data in a database & Create reports to display database information.

Chapter 1 Getting Started with Microsoft PowerPoint

- **Objectives:** Create a New Presentation, Edit a Presentation in Normal View, Add Pictures to a Presentation, Print and View a Presentation, Edit an Existing Presentation, Format a Presentation, Use Slide Sorter View, Apply Slide Transitions

- **Outcomes:** Create a company overview presentation & Create a new product announcement presentation.

Chapter 2 Formatting PowerPoint Presentations

- **Objectives:** Format Numbered and Bulleted Lists, Insert Online Pictures, Insert Text Boxes and Shapes, Format Objects, Remove Picture Backgrounds and Insert WordArt, Create and Format a SmartArt Graphic

Outcomes: Format a presentation to add visual interest and clarity & Enhance a presentation with WordArt and SmartArt

Chapter 3 Enhancing a Presentation with Animation, Video, Tables and Charts

- **Objectives:** Customize Slide Backgrounds and Themes, Animate a Slide Show, Insert a Video, Create and Modify Tables, Create and Modify Charts

Outcomes: Customize a presentation with animation and video & Create a presentation that includes data in tables and charts.

SCIENCE AND TECHNOLOGY INTENSIVE COURSE DESIGNATION: This course is designated as a Science & Technology Intensive Course. Students will learn to explain how science and technology influence each other and how both can be used to explore natural and human-created systems.

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

1. Demonstrate basic knowledge of major concepts related to science and technology. Includes: current theories, historical and data trends, empirical findings.
2. Be able to critically read, evaluate and interpret research findings and/or theories and draw reasonable conclusions. Includes: supporting or rejecting a hypothesis or theory, analyzing case studies, providing alternative explanations.
3. Transfer, adapt, and apply prior knowledge to science and technology related issues and develop new understanding.
4. Be able to identify reliable sources of information from a variety of resources. Includes: library, websites, journals, magazines, newspapers, etc.