(CIS 112) Integrated Computer Applications
(Abbreviated copy for student challenge exam review)

COURSE DESCRIPTION: This is a comprehensive course in the use and application of spreadsheets. Students will develop projects using spreadsheets for typical business uses. Topics covered are spreadsheet design including formulas, data tables, multiple sheets, macros, charts, and integration with other office applications.

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 Excel 2013 Comprehensive* by Gaskin, Vargas, and Geoghan, published by Pearson Prentice Hall. ISBN **9781269391702**
- Use of Microsoft Office 2013

COURSE OBJECTIVES & OUTCOMES: The purpose of this course is to develop an in-depth understanding and practical knowledge of the most frequently used software applications and to enable the students to effectively use a personal computer in the home or on the job. Upon successful completion of this course the student's will:

Demonstrate an advanced skill level with electronic spreadsheets through Microsoft Excel
- Use the Sum, Average, Median, Min, Max, Countif, and IF functions.
- Restore error messages, by nesting the IFerror function
- Use the Date and Time Functions.
- Freeze panes
- Edit and Format multiple worksheets at the same time.
- Use/Create Financial Functions.
- Use Goal Seek to Perform What-If Analysis
- Create Data Tables
- Use Excel as a database
- Define Range Names and use them in Formulas/Functions
- Create and use Lookup Functions
- Create Data Validations
- Save Excel Data in Other File Formats

- Analyze spreadsheet data by applying statistical and logical calculations and by sorting & filtering.
- Use Advanced Sort Techniques.
- Create Custom and Advanced filters
- Subtotal, Outline and Group a List of Data.
- Use database functions in Excel.
- Importing external data and querying a database
- Use Daverage, Dsum, Dcount functions, while using Excel's database functionality.
- Plan and Create Excel Macros. Enable, Record, Run, and Edit Macros.
- Record a macro to automate complex and repetitive tasks.
- Assign keyboard shortcuts to macros.
- Assign a macro to a button on the quick access toolbar
- Calculate a moving average, project income and expenses and determine a break-even point.
- Save Excel Data in Other file formats. Use Advanced Sort Techniques.
- Create and Format SparkLines and a Column Chart