# **CIS A234: EXCEL 2**

ItemValueCurriculum Committee Approval10/21/2015

Date

Top Code 070210 - Software Applications

Units 2 Total Units

Hours 36 Total Hours (Lecture Hours 36)

No

Total Outside of Class Hours

Course Credit Status Credit: Degree Applicable (D)

Material Fee

Basic Skills Not Basic Skills (N)

Repeatable

Grading Policy Standard Letter (S),
• Pass/No Pass (B)

## **Course Description**

Create templates and macros using Visual Basic for Applications to automate Excel tasks, formula auditing, data validation, complex problem solving, importing data, routing changes, PivotCharts, PivotTables, and trendlines. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. Enrollment Limitation: BUS A234/CIS A234H; students who complete CIS A234 may not enroll in or receive credit for BUS A234 or CIS A234H. ADVISORY: CIS A134 or BUS A134. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

- Use Excel to create spreadsheet workbook files that include formulas for adding, subtracting, multiplying, and dividing and functions for AutoSum, MAX, MIN, AVERAGE, dAVERAGE, dCOUNT, and vLOOKUP, column, bar, and pie charts, and lists.
- Analyze financial data to perform "What if" analysis, "Goal Seek" analysis, and "If statement" logical tests.

## **Course Objectives**

- 1. Create templates and work with multiple worksheets and workbooks.
- · 2. Link Excel worksheets to Word documents and web discussions.
- 3. Use macros and Visual Basic for Applications (VBA) with Excel.
- 4. Perform formula auditing, data validation, and complex problem solving.
- 5. Import data and route changes.
- 6. Create PivotCharts, PivotTables, and Trendlines.
- 7. Create a PivotTable list web page using Excel.

## **Lecture Content**

Using Macros and Visual Basic for Applications (VBA) with Excel Unprotect password-protected worksheets Building a command macro for toolbars and menu commands Building a command macro to automate data entry Goal Seeking to determine the specified outcomes Using an adjustment center to automate data entry Creating Templates and Working with Multiple Worksheets and Workbooks Creating and formatting templates Create workbooks from templates Using the WordArt tool Adding comments to workbooks Adding headers, changing

margins, and printing workbooks Using Find and Replace commands Consolidating data by linking workbooks Formula Auditing, Data Validation, and Complex Problem Solving Formula auditing by tracing precedents and removing precedents Data validation of cells, trial and error to solve complex problems, and Goal Seek to solve complex problems Using Solver to solve complex problems Saving workbooks with passwords Using Scenario Manager to analyze data Summarizing scenarios Changing properties on workbooks Importing Data, Routing Changes, PivotCharts, PivotTables, and Trendlines Importing text and Access files, Web pages, data from spreadsheet XML Replicating formulas Exporting structured data from Excel Preparing workbooks for routing Reviewing tracked changes Creating and formatting PivotCharts and PivotTables Merging workbooks Adding trendlines to charts Integration Feature Linking Excel worksheets to Word documents and web discussions Web Feature Creating a PivotTable list web page using Excel Microsoft Office Specialist Certification Overview of MOS Program and preparation for MOS exams

# Method(s) of Instruction

- Lecture (02)
- · DE Live Online Lecture (02S)
- DE Online Lecture (02X)

## **Instructional Techniques**

Lecture and application of ideas on electronic spreadsheets Exercise oriented approach that allows learning by doing

## **Reading Assignments**

Minimum of 2 hours per week reading from textbook material.

## **Writing Assignments**

Minimum of 2 hours per week creating and editing spreadsheet files.

### **Out-of-class Assignments**

Students will spend 2-3 hours per week on out-of-class assignments.

#### **Demonstration of Critical Thinking**

Midterm examinations, final examination, lab assignments, student participation

## **Required Writing, Problem Solving, Skills Demonstration**

Assignments may require written student comments and program overview.

## **Eligible Disciplines**

Computer information systems (computer network installation, microcomputer ...: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

#### **Textbooks Resources**

1. Required Shelly, G., Cashman,T., and J. Quasney. Microsoft Excel 2007 Comprehensive Concepts and Techniques, ed. Boston: Course Technology, 2007 2. Required Freund, Steven M., et al. Shelly Cashman Series. Microsoft Excel 2013 Comprehensive, ed. Boston: Course Technology: Cengage Learning, 2014