SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: __BUS-222__   Class/Lect. Hours: __3__   Lab Hours: __0__   Credits: __3__   Dept.: __Business Administration__

Course Title: __Business Decision Tools – Excel and more__   Semester: __Fall__   Year: __2018__

Course Description, Prerequisite, Corequisite:

Students will create and format worksheets primarily using MS Excel; other spreadsheet tools will be introduced. Basic worksheet concepts such as applying font styles, setting margins, modifying cell contents, inputting formulas/functions, and creating various charts will be covered. Advanced topics to be introduced include functions (financial, text, statistical, logical), lookup tables, pivot tables, what-if analysis, macros, templates, and managing workbooks. Business decision products will be introduced, including Microsoft Excel Add-ins, MS Access, data analytics, data mining, business intelligence, and dashboards. Emphasis will be placed on reading data and on assessing the story that is being told by the data. Co-requisite(s): OIT-100, OIT-101, OIT-110

OBJECTIVES/COMPETENCIES

Course Objectives	Competencies
1. Insert formulas in a worksheet, utilizing relative, absolute, and mixed cell reference, and build on complexity of formulas by utilizing functions in formulas. Create formulas utilizing the most efficient format and/or functions. Create and edit spreadsheets of varying complexity.	1. Create a worksheet that contains correct, efficient formulas utilizing mathematical rule for order of operations (PEMDAS) logic in formula setup, and includes basic operators, functions, relative, absolute, and mixed cell reference; build on complexity of formulas.
2. Format a worksheet to gain target audience's attention, including symbols, special characters, SmartArt, WordArt, screenshots, images, and resizing/ cropping pictures as appropriate, and Universal Design considerations to accommodate target audiences with various abilities.	2. Format a worksheet, including changing font, size, color, shading, symbols, special characters. Apply Universal Design principles and create tags for objects in worksheet.

Course Objectives	Competencies
3. Assess the information requirements and then prepare the materials that achieve the goal efficiently and effectively.	3. Create a new worksheet to effectively and efficiently display data; create, edit spreadsheets of varying complexity.
4. Plan, research, create, and revise, worksheets/ workbooks to meet specific communication needs, including but not limited to: managing workbook data; maintaining workbooks; moving and copying data within and between workbooks; and utilizing hyperlinks and form templates.	4. Move and copy data within and between workbooks; utilize hyperlinks and form templates. Insert data and charts into other application tools (Word, PowerPoint).
5. Analyze and summarize numerical data and project outcomes to make informed decisions by: using a filter; utilizing LOOKUP values in a table; creating charts and sparklines; and by utilizing pivot tables and pivot charts.	5. Filter data, create charts and sparklines; use VLOOKUP or HLOOKUP function; analyze data utilizing pivot tables and charts; Perform "What-if" analysis.
6. Automate a repetitive series of keyboard/ mouse actions.	6. Create macros to automate a repetitive tasks.
7. Articulate the story behind any worksheet data, and follow-through with decisions based on the information.	7. Given a worksheet, be able to articulate a story that the data is showing, and consider decision options.
8. Share and exchange data with other programs, both as import and as export files.	8. Import file from another productivity tool, such as Access, into Excel; prepare a worksheet for export as a .csv or other file format.
9. Research other available decision making tools.	9. Assess the power, value of other business decision tools for various types of business decisions.