



## **COURSE SYLLABUS**

Course Title Spreadsheet Techniques  
Course Number CGS1515, Section #0165  
Online Instruction  
Semester Code (505): Semester and Year (Fall 2015)

**Syllabus Addendum:** [www.spcollege.edu/addendum](http://www.spcollege.edu/addendum)

### **INSTRUCTOR**

**Name:** Lawrence F. Bross

**Email:** Please e-mail me via MYCOURSES for all inquiries.

**Phone:** 727- 791-2592

**Office Location:** BT 121, Clearwater Campus

**Instructor Web Page:** [Instructor Web Page: Professor Lawrence F. Bross](http://www.spcollege.edu/~lbross/)

**Alternative E-mail:** [bross.lawrence@spcollege.edu](mailto:bross.lawrence@spcollege.edu) (For use after the semester is over and D2L is closed)

### **ACADEMIC DEPARTMENT**

**Dean:** Dr. Sharon Setterlind

**Office Location:** St. Pete/Gibbs TE

**Office Phone Number:** 727.341.4677

**Email:** [Setterlind.Sharon@Spcollege.edu](mailto:Setterlind.Sharon@Spcollege.edu)

**Academic Chair:** Chrissy Risberg

**Office Location:** BT-102

**Office Phone Number:** 727-791-5940

**Email:** [Risberg.Chrissy@spcollege.edu](mailto:Risberg.Chrissy@spcollege.edu)

**Web Page:** <http://www.spcollege.edu/ccit/>

## **COURSE INFORMATION**

### **Course Description:**

This course will provide students with hands-on experience and skills with a spreadsheet. Students will learn the various functions and commands of the spreadsheet as well as how to plan, create, and program spreadsheets for common business applications. It is appropriate for accounting and business majors, programmers and spreadsheet application developers.

## **Course Goals:**

After completion of this course the student will be able to:

- Construct, modify, and print a professionally designed and formatted spreadsheet.
- Create and manipulate various types of charts and enhance charts with drawing tools.
- Create and use basic formulas and functions.
- Create and use complex and advanced formulas and functions from each category of functions provided by Excel.
- Create macros, customize toolbars, and create command buttons tied to macros (VBA code).
- Create program code using Visual Basic for Applications and the VBA editor.
- Utilize XML for data exchange
- Using named ranges, create a database and perform the following: sort, filter, advance filter, and extract.
- Analyze lists and databases using database functions
- Create Pivot tables, use Solver, Scenario, and Goal Seek for data analysis.
- Using Excel and OLE, share data with other applications.
- Using various Excel tools, perform what if analysis and projections on business data.
- Create 3D worksheets, 3D workbooks, and 3D formulas.
- Validate and control data entry.
- Perform trend analysis.
- Perform Web Queries.
- Explore and utilize the various tools provided by Excel for use in a business environment.

## **Course Objectives**

### **1. The student will learn to plan, design, construct, modify and print a professionally designed and formatted spreadsheet by:**

- a. Investigating and applying design techniques for creating auditable spreadsheets.
- b. Entering values, labels, formulas, mathematical functions and logical functions into a blank spreadsheet.
- c. Making changes in a spreadsheet using the edit function.
- d. Copying or moving parts of a spreadsheet using the copy, cut, paste, drag and drop and paste special features utilizing the keyboard, the menus or the mouse.
- e. Identifying, naming, saving, renaming and retrieving the appropriate file.

### **2. The student will learn to develop and design various types of charts and modify charts with drawing tools by:**

- a. Creating 2 dimensional pie charts, column charts, bar charts and line charts.
- b. Creating 3 dimensional pie charts, column charts, bar charts and line charts.

- c. Applying and removing legends, data points, data tables, gridlines and titles.
- d. Enhancing charts with drawing tools, clip art, colors, borders, shadows and arrows.
- e. Manipulating 3 dimensional charts by changing perspective and elevation and rotating the X and Z axis.
- f. Inserting a chart as an embedded object on the current worksheet.
- g. Inserting a chart on a new worksheet.
- h. Printing charts embedded on the worksheet with the worksheet data or as a chart only.
- i. Creating data maps and manipulating the data map object.

**3. The student will learn to create and demonstrate basic mathematical formulas and functions by:**

- a. Defining the order of mathematical operations and describing how the spreadsheet program calculates mathematical formulas.
- b. Defining the mathematical operators and using these operators to create basic mathematical formulas.
- c. Defining the purpose of functions.
- d. Applying basic functions such as SUM, AVERAGE, MIN, MAX.
- e. Applying auditing techniques to ensure correct answers for formulas and functions.

**4. The student will learn to create and apply complex and advanced formulas and functions from each category of functions provided by the spreadsheet program by:**

- a. Employing Logical functions for decision making.
- b. Employing Statistical functions to analyze data.
- c. Employing Financial functions to solve business problems.
- d. Employing Date and Time functions to analyze dates and calculate due dates.
- e. Employing Math and Trig functions to solve business math problems.
- f. Employing Lookup and Reference functions to analyze large lists of data.
- g. Employing Text functions to manipulate character strings.
- h. Employing Informational functions as a method of controlling software error messages.

**5. The student will learn to employ named ranges, create a database and perform the following: sort, filter, advanced filter, extractions and analyze lists and databases using database functions by:**

- a. Naming ranges in a spreadsheet for navigation purposes.
- b. Naming ranges in a spreadsheet for use in formulas and functions.
- c. Naming ranges in a spreadsheet to define criteria and extraction areas.
- d. Defining the purpose of a database and assigning a named range to the database.
- e. Sorting data using Sort buttons.

- f. Sorting data using a sort form.
  - g. Filtering data using a filter form.
  - h. Filtering data using an autofilter.
  - i. Filtering data by creating an advanced filter to extract data based on multiple criteria.
  - j. Analyzing data using database functions.
- 6. The student will learn to produce Pivot Tables and Pivot Charts for in-depth data analysis by:**
- a. Defining and describing the purpose of Pivot tables and Pivot Charts.
  - b. Creating a pivot table for data analysis based on multiple criteria.
  - c. Creating a pivot chart for data analysis based on multiple criteria.
  - d. Employing Solver, Scenario and Goal Seek to analyze business data and make projections based on that analysis.
- 7. The student will learn to employ various spreadsheet tools to perform what-if analysis and projections on business data by:**
- a. Adjusting the spreadsheet to display four quadrants.
  - b. Splitting the screen.
  - c. Manipulating cells in order to change bottom line totals.
- 8. The student will learn to construct 3D worksheets, 3D workbooks and 3D formulas by:**
- a. Explaining how to work with 3 dimensional worksheets and workbooks.
  - b. Creating 3 dimensional formulas and functions that reach through worksheets and workbooks to calculate and manipulate values.
  - c. Employing consolidation features to combine multiple workbooks into a new workbook.
  - d. Employing 3 dimensional links to automatically update 3 dimensional worksheets and 3 dimensional workbooks.
- 9. The student will learn techniques for validating data and controlling data entry in order to preserve the integrity of the spreadsheet data by:**
- a. Creating nested functions that will provide feedback to the data entry person when incorrect amounts are entered into a cell.
  - b. Creating validation rules and text that will provide feedback to the data entry person when incorrect amounts are entered into a cell.
- 10. The student will learn to perform statistical trend analysis on business data by:**
- a. Creating a linear growth analysis.
  - b. Creating a trend analysis.
  - c. Creating a growth analysis.

**11. The student will perform Web Queries by:**

- a. Creating worksheets based on existing Web Queries.
- b. Creating worksheets based on gathering data from the stock market via a query.
- c. Updating worksheets created by Web Queries with daily current information.

**12. The student will explore and utilize the various tools provided by the spreadsheet program for use in a business environment by:**

- a. Creating an amortization table.
- b. Calculating monthly payments.
- c. Calculating due and past due dates.
- d. Calculating accounts receivable/accounts payable.
- e. Creating a payroll for a small company.
- f. Manipulating an inventory.

**13. The student will learn to create macros to automate the spreadsheet functions, customize toolbars and create command buttons tied to macros by:**

- a. Recording a macro using the keyboard.
- b. Attaching a macro to a custom toolbar.
- c. Attaching a macro to a command button.
- d. Editing a recorded macro using the Visual Basics for Applications Editor (VBA).
- e. Listing and explaining the steps necessary to write, enter, debug and execute a spreadsheet application.
- f. Employing the macro language to solve common business applications problems.
- g. Discussing the steps a spreadsheet designer would take to correct logic errors when the macro does not execute properly.

**14. The student will compose program code using Visual Basic for Applications (VBA) and the VBA editor to facilitate data entry and automate the spreadsheet application by:**

- a. Utilizing branching statements.
- b. Creating message boxes.
- c. Writing Visual Basic for Applications code in the VBA editor that will allow keyboard entry via input boxes.
- d. Creating a complete application that controls the data entry person's access to sensitive data
- e. Creating a complete application that controls the data entry person's access to sensitive data.
- f. Debugging code.
- g. Creating error handling procedures.
- h. Designing forms and automating tasks with VBA.

**15. The student will share spreadsheet data with other applications using Object Linking and Embedding (OLE) and the Internet by:**

- a. Describing paste, paste special and paste link.
- b. Linking spreadsheet data to a word processing program.
- c. Linking charts to a word processing program.
- d. Exporting spreadsheet data to a database program.
- e. Copying data to a presentation package.
- f. Importing data from a word processing program.
- g. Importing data from a database program.
- h. Converting a spreadsheet to hypertext markup language (HTML).

**Prerequisites:** CGS 1000 or CGS 1100.

This course will be open and available throughout the modmester. You may work ahead but not behind. Late work **will not** be accepted, reviewed, or graded.

**REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION**

<b><i>MyITLab with Pearson eText -- Access Card -- for Exploring Microsoft Office 2013</i></b>	<b>9780133775075</b>	<b><i>Required</i></b>	<b><i>Custom</i></b>	<b><i>Pearson</i></b>
<b><i>***OPTIONAL GO GOOGLE GET START&amp;OFF MICROSOFT 365 HOME 180DAY 2013 TRIAL PKG</i></b>	<b>978-0134264189</b>	<b><i>Opt/Required unless they already have 2013</i></b>		<b><i>Pearson/Microsoft</i></b>

**NOTE: Software:** Microsoft Office Excel 2013 Professional (For students that do not have the required software, the bookstore carries a 180 day trial subscription). The software also available on computers at SPC Campus [Learning Support Commons](#) and [Libraries](#). If you are a degree seeking student, you may download it from the SPC website.

**Bookstore:** [www.spcollege.edu/textbooks](http://www.spcollege.edu/textbooks)

**Library:** [www.spcollege.edu/libraries](http://www.spcollege.edu/libraries)

**LEARNER SUPPORT**

**Accessibility:** [www.spcollege.edu/dr](http://www.spcollege.edu/dr)

This course is open and assignments are due weekly. There are no special accommodations required for this course.

**Academic Support Services:** [www.spcollege.edu/support](http://www.spcollege.edu/support)

**On-Campus Support:** [www.spcollege.edu/tutoring/#tab=2](http://www.spcollege.edu/tutoring/#tab=2)

Online Support: [www.spcollege.edu/tutoring/#tab=3](http://www.spcollege.edu/tutoring/#tab=3)

The college provides support to assist you in being successful. Please take advantage of these free resources.

**Student Services and Resources:** [www.spcollege.edu/services](http://www.spcollege.edu/services)

The college provides support to assist you in being successful. Please take advantage of these free resources.

## **IMPORTANT DATES**

**Course Dates:** 10/12/2015

**Drop Date:** 10/16/2015

**Withdrawal Date:** 11/13/2015

**Financial Aid Dates:** [www.spcollege.edu/pages/dynamic.aspx?id=800](http://www.spcollege.edu/pages/dynamic.aspx?id=800)

## **DISCIPLINE SPECIFIC INFORMATION**

In this section, you can provide discipline-specific information as well as program information with links (e.g., disposition, standards, etc.)

## **ATTENDANCE**

**The College-wide attendance policy is included in the Syllabus Addendum:**

[www.spcollege.edu/addendum/#attend](http://www.spcollege.edu/addendum/#attend)

**For this class, attendance is defined as:**

- Attendance will be taken for the first two weeks of the class to determine if you have been actively participating in the class. You need to complete the following to be considered to be actively participating in the class:
  - **Start Here & Syllabus Quiz and Week 1 assignments**
  - **Week 2 assignments.**
- If you are not actively participating for the first two weeks, you will be withdrawn from the class with a "W". You will also be denied access to the course on MyCourses.
- At the 60% point of the class, attendance will be taken for the third time to determine that you have been actively participating. This will be determined by the following:
  - **Completion of least 70% of work assigned to date.**
- If you are considered not actively participating in the course at the 60% point, you will be withdrawn with a "WF".
- Students are required to withdraw themselves on or before the 60% point in the course to receive a grade of "W". The final date for voluntary withdrawal is published in the academic calendar. This date varies for dynamically dated, express and modmester courses. **NOTE** - Your instructor will not be able to withdraw you from the class. It is your responsibility.
- If a student wishes to withdraw after the 60% point they will receive a "WF" grade.

## GRADING

\*\*Grading will be based on a point system. The breakdown for each is as follows:

Title	Points	Percentage
Start Here	20	.8%
Chapter Skill-Based Trainings	184	7.7%
Chapter Grader [Homework] Projects	600	25.0%
Chapter Grader [Assessment] Projects	1200	49.9%
Capstone	200	8.3%
GMetrix	200	8.3%
Total	2404	

A - 90%  
B - 80%  
C - 70%  
D - 60%  
F - below 59%

\*\*Subject to change with notification\*\*

**Late assignments will not be accepted, reviewed, or graded.**

Grades will not be rounded unless the final grade is a 69.5, 79.5, 89.5 or greater.

The only extra credit provided is for submission of the Student Survey of Instruction.

## ASSIGNMENTS

1. All Assignments are listed in the Assignment Checklist located in MyCourses under Course Content.
2. If there are any problems with completion of the assignment by the appointed date, the student must discuss the matter with the instructor **PRIOR** to the due date.
3. It is the student's responsibility to follow the schedule of class assignments.
4. **Late work will not be accepted, graded, or reviewed.**
5. You will need access to the Internet and Microsoft Office Excel 2013 for this class. All SPC campus libraries and Learning Resource Commons have this program loaded on its computers.
6. You will also need MyITLab for the majority of assignments and GMetrix for additional assignments.
7. Assignments may be completed more than once. The highest score submitted on-time will be the recorded in MyCourses.



## **STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS**

The student is expected to complete all assignments on-time. The Instructor will respond to a student within 36 hours or less. While an online course is available 24 hours a day, the instructor is not. MyCourses email is the best way to reach the instructor.

MyITLab provides the student with immediate feedback on all assignments. You may go to the assignment, click view submission and it will take you to your grade. Click View Submission and you will see what areas you may wish to redo for a better grade. Once you review your submission, if you have any questions, please email the specific name of the assignment and the question(s) associated with that assignment.

The Learning Support Commons provide assistance. Each campus (LSC) has different hours of operation. Ask for assistance if a tutor is not available.

### **Online Student Participation and Conduct Guidelines:**

[www.spcollege.edu/addendum/#onlineguide](http://www.spcollege.edu/addendum/#onlineguide)

**Academic Honesty:** [www.spcollege.edu/academichonesty](http://www.spcollege.edu/academichonesty)

**Netiquette:** All communication should be made in a professional, respectful manner. Please use correct grammar/spelling.

### **TURNITIN**

The instructor of this course may require use of Turnitin.com as a tool to promote learning. The tool flags similarity and mechanical issues in written work that merit review. Use of the service enables students and faculty to identify areas that can be strengthened through improved paraphrasing, integration of sources, or proper citation. Submitted papers remain as source documents in the Turnitin database solely for the purpose of detecting originality. Students retain full copyright to their works. The Turnitin Usage Agreement can be reviewed at: [turnitin.com/agreement.asp](http://turnitin.com/agreement.asp). Students who do not wish to submit work through Turnitin must notify their instructor via course email within the first seven days of the course. In lieu of Turnitin use, faculty may require a student to submit copies of sources, preliminary drafts, a research journal, or an annotated bibliography.

## **STUDENT SURVEY OF INSTRUCTION**

**The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.**

## **TECHNOLOGY**

### Minimum Technology Requirements:

Item	Recommended Minimum Technology Requirements for CCIT Programs
<b>Processor</b>	Dual-core processor (Intel or AMD)
<b>Memory</b>	4 GB (or higher)
<b>Disk Storage</b>	Adequate free space for storage of class files
<b>Video Card</b>	256 MB (or higher)
<b>Monitor/Speakers</b>	15" or larger Flat LCD Panel
<b>Media Drive</b>	16x DVD +/- RW
<b>Operating System</b>	Windows 7 (or higher)
<b>Network Interface</b>	High Speed Broadband Internet Connection (Cable or DSL)
<b>Software</b>	Microsoft Office Suite 2013 or later with the following: <ul style="list-style-type: none"><li>• Word</li><li>• Excel</li><li>• Access</li><li>• PowerPoint</li></ul>
<b>Access requirements</b>	<ul style="list-style-type: none"><li>• Reliable and daily access to a personal computer (PC) from day 1 of class</li><li>• Ability to download/upload documents and files</li><li>• Browsers:<ul style="list-style-type: none"><li>○ Internet Explorer (version 11 or higher)</li><li>○ Firefox (version 31.0 or higher)</li><li>○ Google Chrome 36.0</li></ul></li></ul>

These are the minimum suggested technology requirements necessary to complete the programs within CCIT. All students and instructors are required to have access to a personal computer, personal high speed access to the Internet, and a college provided email account. The "minimum requirements" pertain to Windows Operating System compatible personal computers. These minimum requirements are a general recommendation for all CCIT courses. Some courses may have additional software and hardware requirements in order for students to be successful.

### Minimum Technical Skills:

Students must know how to use a computer, keyboard, and mouse. Basic math skills are required as formulas require critical thinking skills to create formulas.

**Accessibility of Technologies:**

**MyCourses** (Brightspace by D2L) **Accessibility Statement:**  
[www.brightspace.com/about/accessibility](http://www.brightspace.com/about/accessibility)

**Privacy:**

**MyCourses** (Brightspace by D2L) **Privacy Statement:**  
[www.brightspace.com/legal/privacy](http://www.brightspace.com/legal/privacy)

QM 6.5: Provide link to privacy policy for all external tools required in the course.

**Technical Support:** [www.spcollege.edu/helpdesk](http://www.spcollege.edu/helpdesk)

The College provides student technical support for MyCourses.

MyITLab technical support is available at <http://247pearsoned.custhelp.com/>. Chat is available 24 hours/7 days a week. The telephone number is listed on the Course Content page of MyCourses. It is available only during certain days and hours. This support is technical and does not provide assistance in how to complete an assignment.