



# Broward Community College

## Course Outline

STATUS:   A  

COMMON COURSE NUMBER:   CGS 1510  

COURSE TITLE:   Electronic Spreadsheet  

CREDIT HOURS:           3          

**CONTACT HOURS BREAKDOWN:**

Lecture/Discussion           48          

Lab   

Other   

Contact Hours/Week           3          

**CATALOG COURSE DESCRIPTION:**

Prerequisite:   None

Corequisite:   None

This course provides hands-on applications with a spreadsheet software package. Through lecture and lab practices, students will develop skills that create, manipulate and utilize spreadsheets.

General Education Requirements - Associate of Arts Degree, meets Area(s):  
 General Education Requirements - Associate in Science Degree, meets Area(s):

**UNIT TITLES:**

1. Introduction to DOS
2. Introduction to Spreadsheets
3. Labels, Edit, and Erase
4. File Commands
5. Worksheet Construction
6. Numbers, Formats, and Ranges
7. Formulas and Functions
8. Printing a Worksheet
9. Naming Ranges
10. Absolute and Relative Address Concepts
11. Manipulating Large Spreadsheets
12. Creating a Database
13. Graph Design
14. Macroprogramming
15. Import/Export Concepts

## **I. Course Overview:**

Upon successful completion of this course, the students should be able to create, design logic, test for accuracy, and debug spreadsheet applications.

## **II. Units:**

### **Unit 1. Introduction to DOS**

#### General Outcome:

1.0 The students should be able to apply DOS to support the use of electronic spreadsheets.

#### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Boot DOS.
- 1.2 Format a diskette.
- 1.3 Copy a diskette.
- 1.4 Copy files.
- 1.5 Display directories.
- 1.6 Change active drives.
- 1.7 Delete selected files.
- 1.8 Apply wildcard symbols.
- 1.9 Identify the proper care and maintenance of a diskette.

## Unit 2. Introduction to Spreadsheets

### General Outcome:

2.0 The students should be able to demonstrate proficient use in accessing the spreadsheet program.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Enter the worksheet area of the spreadsheet software.
- 2.2 Accurately use the personal computer keyboard in using spreadsheet function keys.
- 2.3 Demonstrate accurate use of the cursor navigation keys.
- 2.4 Access command menus.
- 2.5 View "Help" screen.

### Unit 3. Labels, Edit, and Erase

#### General Outcome:

3.0 The students should be able to enter labels, edit, and erase.

#### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 3.1 Create separator lines.
- 3.2 Enter labels left justify, center, and right justify.
- 3.3 Demonstrate how to repeat an entry.
- 3.4 Demonstrate how to edit an entry before and after it is entered into the worksheet.
- 3.5 Demonstrate how to erase a complete cell entry.

## Unit 4. File Commands

### General Outcome:

4.0 The students should be able to identify file commands and demonstrate the use of each command.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Name a file.
- 4.2 Save a file.
- 4.3 Obtain a list of files.
- 4.4 Retrieve a file.
- 4.5 Combine files.
- 4.6 Delete a file.
- 4.7 Change the default directory.

## Unit 5. Worksheet Construction

### General Outcome:

5.0 The students should be able to demonstrate proficiency in applying basic worksheet construction techniques.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 5.1 Adjust column widths.
- 5.2 Identify default width.
- 5.3 Change label justification.
- 5.4 Demonstrate how to copy the contents of a cell.
- 5.5 Demonstrate how to move the contents of a cell.
- 5.6 Enable the protection feature for worksheet cells.

## Unit 6. Numbers, Formats, and Ranges

### General Outcome:

6.0 The students should be able to enter numbers, change formats, and move ranges.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 6.1 Identify the different formats for numbers.
- 6.2 Change the format of numbers.
- 6.3 Identify allowable numbers.
- 6.4 Enter a number in currency format.
- 6.5 Enter a number in comma format.
- 6.6 Enter a number in percent format.
- 6.7 Enter a number in date format.
- 6.8 Demonstrate how to move a range from one location to another.

## Unit 7. Formulas and Functions

### General Outcome:

7.0 The students should be able to enter formulas and use functions.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

7.1 Identify formula operators and the components that make up a formula.

7.2 Build a formula in a worksheet cell.

7.3 Recognize the classifications of the following functions:

7.3.1 Statistical

7.3.2 Mathematical

7.3.3 Financial

7.3.4 Date and Time

7.3.5 Logical

7.4 Copy a formula to other worksheet cells.

## Unit 8. Printing A Worksheet

### General Outcome:

8.0 The students should be able to demonstrate how to print a worksheet.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

8.1 Turn printer on/off.

8.2 Send a worksheet file to the printer.

8.3 Change print options.

8.3.1 Margins

8.3.2 Page Breaks

8.3.3 Blocks

8.3.4 Compressed print

## Unit 9. Naming Ranges

### General Outcome:

9.0 The students should be able to name a range.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

9.1 Name a range.

9.2 Create a table of named ranges.

9.3 Use the "GOTO" key to navigate directly to a cell range.

9.4 Delete a range name.

## Unit 10. Absolute and Relative Address Concepts

### General Outcome:

10.0 The students should be able to use absolute and relative addresses in formulas.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 10.1 Lock a column reference in a formula to be an absolute address.
- 10.2 Lock a row reference in a formula to be an absolute address.
- 10.3 Recognize the affect the copy function produces when copying a formula having relative addresses.
- 10.4 Recognize the affect the copy function produces when copying a formula having absolute addresses.

## Unit 11. Manipulating Large Spreadsheets

### General Outcome:

11.0 The students should be able to initiate commands designed to facilitate working with large spreadsheets.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 11.1 Change auto recalculation to manual.
- 11.2 Force recalculation by using the recalculation function key.
- 11.3 Split the screen horizontally using a window command.
- 11.4 Split the screen vertically using a window command.
- 11.5 Recognize how a large spreadsheet will be normally divided when printing the spreadsheet.
- 11.6 Lock row and column titles on the screen.

## Unit 12. Creating a Database

### General Outcome:

12.0 The students should be able to create, sort, and query a database.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

12.1 Create a database.

12.2 Sort the database.

12.2.1 Specify the key field that controls the sort.

12.2.2 Specify ascending or descending sequence.

12.3 Query a database.

12.3.1 Establish criteria to be used in the query.

12.3.2 Save data extracted by a query operation in an independent file.

## Unit 13. Graph Design

### General Outcome:

13.0 The students should be able to demonstrate the ability to perform graphics on the computer.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

13.1 Create and print a bar or stacked-bar graph.

13.2 Create and print a line graph.

13.3 Create and print a pie chart.

13.4 Modify graph settings:

13.4.1 Graph Titles

13.4.2 Axis Titles

13.4.3 Legends

13.4.4 Scales

## Unit 14. Macroprogramming

### General Outcome:

14.0 The students should be able to develop macros for a spreadsheet.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

14.1 Create a macro.

14.2 Name a macro.

14.3 Execute a macro.

14.4 Debug a macro.

14.5 Apply advanced database commands from the following classifications:

14.5.1 Statistical

14.5.2 Mathematical

14.5.3 Financial

14.5.4 Date and Time

14.5.5 Logical

## Unit 15. Import/Export Concepts

### General Outcome:

15.0 The students should be able to create spreadsheet files that can be used by other spreadsheet programs.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

15.1 Create an ASCII spreadsheet file.

15.2 Import an ASCII spreadsheet file.

15.3 Convert the ASCII file into worksheet form for use by the spreadsheet program.

**Special Student Projects:**

Complete seven to ten (7-10) assignments using a spreadsheet application software.