

**CS 61.11 Course Outline as of Summer 2017****CATALOG INFORMATION**

Dept and Nbr: CS 61.11 Title: MS EXCEL

Full Title: Microsoft Excel

Last Reviewed: 3/23/2015

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CIS 61.31

**Catalog Description:**

An introduction to the use of Microsoft Excel software. Topics covered include the Excel user interface, creation of simple and advanced formulas and functions, chart creation, linked and 3D formulas, Excel's database commands, what if analysis, pivot table and pivot charts and an introduction to macros and visual basic for applications (VBA).

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: An introduction to the use of Microsoft Excel software. Topics covered include the Excel user interface, creation of simple and advanced formulas and functions, chart creation, linked and 3D formulas, Excel's database commands, what if analysis, pivot table and pivot charts and an introduction to macros and visual basic for applications (VBA). (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>			Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Spring 1992	Inactive:	Fall 2020
<b>UC Transfer:</b>		Effective:		Inactive:	

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Translate business rules into spreadsheet formulas.
2. Format data to enhance its understandability.
3. Manipulate worksheet data using Excel data commands.
4. Perform what-if analysis on worksheet data.
5. Create charts that accurately display numeric results in graphic form.

### **Objectives:**

Upon completion of the course, students will be able to:

1. Make effective use of basic Excel commands.
2. Apply at least six basic functions and four advanced functions.
3. Apply and use relative and absolute cell references in formulas.
4. Apply a minimum of six cell formats.
5. Apply proper design techniques to simple and multi-sheet workbooks.
6. Design, prepare, and utilize a database in Excel.
7. Create at least four kinds of charts.

### **Topics and Scope:**

1. Introduction to Excel
  - a. Worksheet components
  - b. Rows, columns, cells, cell addressing
  - c. Insertion and deletion of rows and columns
  - d. Setting column width and row height
  - e. Types of data
    - 1) Numbers
    - 2) Labels

- 3) Formulas
- 4) Functions
- f. Moving about the worksheet
- g. Editing the contents of a cell
- h. Windows and freezing panes
- 2. Formulas
  - a. Using Excel's mathematical operators
  - b. Creating formulas
    - 1) Formulas with cell addresses
    - 2) Relative and absolute references
  - c. Applying the rules of order of precedence
  - d. Range names
  - e. 3-D formulas
  - f. Formulas linked to cells in other workbooks
- 3. Formatting
  - a. Applying formats
    - 1) Number formats
    - 2) Text formats
  - b. Conditional formats
- 4. Printing
  - a. The print dialog box
  - b. The page setup dialog box
    - 1) Headers and footers
    - 2) Fit to page
    - 3) Print range
- 5. Built in Functions
  - a. Statistical - SUM, AVERAGE, MIN, MAX, COUNT
  - b. Logical
    - 1) IF
    - 2) Nested IFs
  - c. Data reference - VLOOKUP, HLOOKUP
  - d. Date and Time - NOW, DATE, TODAY
  - e. Math - ROUND
  - f. Financial - PMT
- 6. What if analysis
  - a. Goal seek
  - b. Scenario manager
  - c. Data tables
- 7. Database
  - a. Sorting a table
  - b. Filtering a table
  - c. Subtotals
  - d. Pivot tables
  - e. Pivot charts
- 8. Charts
  - a. Chart types
    - 1) Column
    - 2) Pie
    - 3) Bar
    - 4) Line
    - 5) Scatter
  - b. Formatting charts

- c. Printing charts
- d. Chart locations
  - 1) Embedded charts
  - 2) Chart sheets
- 9. Pivot Tables, Charts
- 10. Macros
  - a. Using the Macro recorder
    - 1) Relative
    - 2) Absolute recording
  - b. VBA (Visual Basic for Applications) and editing macro code

### Assignment:

- 1. Performance exams on computer
- 2. Read 20-30 pages per week
- 3. Answer end-of-chapter questions
- 4. Computer tutorial labs
- 5. Case studies completed on the computer
- 6. Two or three tests

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems (end-of-chapter questions), case studies, lab assignments

Problem solving  
70 - 75%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams

Skill Demonstrations  
25 - 30%

**Exams:** All forms of formal testing, other than skill performance exams.

None

Exams  
0 - 0%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None
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Other Category 0 - 0%
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**Representative Textbooks and Materials:**

New Perspectives: Microsoft Excel 2013 Comprehensive, by Parsons and Oja. Course Technology, 2013.