



CONTINUING EDUCATION

Course Outline

Microsoft Excel 2019 Level 3

Put the full power of Excel right at your fingertips, and get the answers you need from the vast amounts of data your organization generates. Topics include lookup and decision-making functions; auditing and error-handling; array functions; special functions such as date, time and text functions; importing and exporting; what-if-analysis; automating repetitive tasks by recording and running macros; and forms.

Who Should Take This Course?

You will benefit most from this class if you want to use Excel 2019 to perform tasks such as getting information from large amounts of data sources inside and outside of Excel, creating output that varies according to conditions, manipulating dates and texts and automating repetitive tasks. This course, and the preceding two courses, map to the objectives of the Microsoft Office Specialist and Expert exams for Excel 2019.

Course Objectives

- Using the IF functions to meet certain conditions and the LOOKUP and reference functions to make decisions and return information from arrays and tables
- Finding and trapping errors
- Controlling formula options
- Using array formulas and special functions such as date, time and text
- Compare methods of connecting to external data from Excel
- Using Power Pivot to access information and perform queries in the Power Pivot Data Model
- Exporting Excel worksheets to other formats
- Performing what-if analyses by using a watch window, scenarios and the Goal Seek utility
- Using some of the tools available in the Analysis Toolpak
- Recording and running macros
- Creating a simple form

Course Info

- Length: 7 hours
- Format: Classroom instruction, demonstration and practice
- Prerequisite: Microsoft Excel Level 2

Course Content

Decision-Making Functions

- Using IF to return one value when a condition is true and another when that condition is false
- Nesting IF functions or using other logical functions such as AND and OR to evaluate more complex decision scenarios
- Using SUMIF and SUMIFS to calculate totals only when one or more conditions are met

LOOKUP and Reference Functions

- Using a LOOKUP function to find an exact match for a value and then returning another value
- Using a LOOKUP function to find an approximate match in a range and then returning another value
- Use INDEX and MATCH together to look up values based on two variables

Auditing and Error-Trapping

- Tracing precedent and dependent cells for a formula
- Finding and correcting the source of errors in a formula
- Evaluating a formula to understand what it does
- Using IFERROR to display a value if a formula produces an error

Formula Options

- About calculation and iteration, and controlling both
- Displaying formulas

Arrays

- About arrays and the various ways in which Excel uses them
- Entering an array formula to perform more than one calculation with a single formula
- Entering an array function

Date and Time Functions

- Manipulating dates to give you information about the current date, year, month or day of the week
- Calculating days or workdays between two dates
- Calculating an end date given a start date and a number of workdays

Text Functions

- Combining, trimming and altering text values using text functions
- Getting information out of a text value by using text functions

Other Functions

- Viewing a category of functions
- Using MIN, MAX and COUNT
- About financial functions and using FV

The Power Pivot Data Model

- Importing data from a text file into Excel
- Getting external data from a Microsoft Access database
- Using Power Pivot to access features of the Power Pivot Data Model
- Exporting Data
- Using Save As to export data in various formats
- Saving worksheets as text files

What-if Analysis

- Using a watch window to observe formula values change as you change precedent cells
- Using scenarios to observe how different sets of input values affect worksheet outcomes
- Using Goal Seek to find input values according to a desired formula outcome

The Analysis Toolpak

- About the Analysis Toolpak and loading its add-in
- Using the Analysis Toolpak to calculate the Pearson correlation coefficient for two-variable data
- Using the Analysis Toolpak to create a histogram for a set of data

Recording Macros

- What a macro is and how to run one
- Recording a simple formatting macro
- Examining and editing code in a recorded macro
- Controlling the recording of relative and absolute references in a macro

Running Macros

- Assigning macros to buttons on the ribbon or the Quick Access toolbar
- Assigning macros to objects on a worksheet
- Naming macros, so they run when a workbook is opened or closed

Forms

- About userforms and how they work
- About the various kinds of controls you can add to a userform
- Setting properties of userforms and controls
- Editing VBA code associated with controls on a userform

Assessment /Evaluation

This course is not assigned a letter or numerical grade. However, in some cases, skill assessments may be administered during the course to gauge progress and comprehension.

Course Completion/Continuing Education Unit (CEU) Letter

If your company requires proof of course completion, or if you would like to have proof for your own records, you may request a Course Completion/Continuing Education Unit (CEU) letter **after the final session of your course**. You must attend* 80 percent of the course (or 100 percent of a single-day course) to qualify for the letter. You can [request a Course Completion/CEU letter online](#).

*Attendance is verified through the Sign-in Sheet/Roster. It is your responsibility to sign-in at every session.

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The accommodations authorized on your forms should be discussed with your instructor. All discussions will remain confidential. Accommodations are not provided retroactively, so it is essential to discuss your needs at the beginning of the quarter. Additionally, only accommodations approved by Disability Support Services will be provided. This syllabus is available in alternate formats upon request. Green River College is an equal opportunity educator and employer. Learn more at www.greenriver.edu/accessibility.