



Microsoft Excel 2016 Level 3

Unleash the power of data, and gain advanced tools for solving real-world problems. Topics include using functions to make decisions and return information from arrays and tables; auditing and error-trapping; using array formulas and functions; date, time and text functions; importing and exporting data; performing what-if-analysis by using a watch window, scenarios and the Goal Seek utility; automating repetitive tasks with macros; and creating a simple form.

Who Should Take This Course?

This course is intended for students who are experienced Excel 2016 users and have a desire or need to advance their skills in working with some of the more advanced Excel features. This course maps to the objectives of the Microsoft Office Specialist and Expert exams for Excel 2016.

Course Objectives

- Use function to make decisions and to return information from arrays and tables
- Find and trap errors; control formula options; and use array formulas and functions
- Perform calculations on dates; manipulate text; and use some statistical and financial functions
- Import or create a connection to external data; use Power Pivot and cube functions to access information in the Power Pivot Data Model; and export Excel worksheets to other formats
- Perform what-if analyses by using a watch window, scenarios, and the Goal Seek utility; and use some of the tools available in the Analysis Toolpak
- Record and run macros, and create a simple form

Course Info

- Length: 7 hours
- Format: Classroom instruction, demonstration and practice
- Prerequisite: Microsoft Excel 2016 Level 2 or equivalent experience

Course Content

Use function to make decisions and to return information from arrays and tables

- Use functions to make decisions; use IF functions to return different values, depending on whether a condition is true; nest IF functions, and use AND, OR, or NOT to make more complex decisions; and use SUMIF and SUMIFS to calculate sums based on criteria
- Understand how lookup functions work; use VLOOKUP to return a value from a table based on a lookup value; and use MATCH and INDEX to find the location of a value in a table and then return that value



Find and trap errors; control formula options; and use array formulas and functions

- Use formula auditing features; find errors in your formulas by tracing and evaluating formulas; and trap errors using IFERROR
- Control formula options, such as calculation and iteration; and display formulas
- Use array formulas and functions to perform multiple calculations on multiple ranges using a single formula; and exchange rows and columns by using TRANSPOSE

Perform calculations on dates; manipulate text; and use some statistical and financial functions

- Use date and time functions; use functions to get information about dates; and calculate dates and times
- Use functions to combine, trim or get information from text values
- Use statistical, such as MIN, MAX and COUNT; use financial functions; and calculate future value of an investment or loan using FV

Import or create a connection to external data; use Power Pivot and cube functions to access information in the Power Pivot Data Model; and export Excel worksheets to other formats

- Use the Power Pivot Data Model to import and work with data from other sources in Excel, including how to import, structure and format text files; get and manage external data connections; load the Power Pivot Excel add-in; and use PowerPivot and cube functions to access the Power Pivot Data Model
- Export Excel workbooks to various formats, especially text formats such as CSV, and why you would use different export formats

Perform what-if analyses by using a watch window, scenarios, and the Goal Seek utility; and use some of the tools available in the Analysis Toolpak

- Perform what-if analysis by using a watch window; use scenarios to save and switch between different sets of input values for a worksheet; and use Goal Seek to solve for an input value when you have a desired outcome for a formula
- Use the Analysis Toolpak and the tools it provides for analyzing data; calculate correlation for two sets of data; and create a histogram to show frequency of grouped data values or bins

Record and run macros, and create a simple form

- Use macros to automate repetitive tasks; and record and run macros
- Identify various ways to run a macro
- Use forms to gather input from users, and create simple forms



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 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 Continuing Education Unit (CEU) letter, **after the final session**. You must attend 80 percent of the course to qualify for the letter.* To request a CEU letter, please stop by the front desk after the last session of class and complete the CEU Request Form.

Certificates of Completion for Certificate Programs

Certificates of Completion are automatically given at the end of the certificate program to those who have registered for a certificate program series (or after Part 2 of the series, when applicable) as long as attendance* and other program requirements have been met. If you complete a certificate program by taking courses individually (not through a series), please stop by the front desk and complete a Certificate Request Form. Attendance requirements for certificate programs vary by certificate and can be found by visiting [Certificate Programs & Certifications](#) on our website.

*Attendance for CEU letters and certificate programs is verified via the sign-in sheets provided at each class session. It is the students' responsibility to sign-in.

Green River College is committed to providing access to all who visit, work and study on campus. The College will provide reasonable accommodations for individuals with disabilities, with advance notice of need. If you require accommodations, please contact Disability Support Services as soon as possible to determine eligibility and/or request accommodations. Accommodations are determined on a case-by-case basis. Please contact Disability Support by email at dss@greenriver.edu; by phone at 253-833-9111, ext. 2631; TTY 253-288-3359; or in person at the Student Affairs and Success Center, Room 274, to request accommodations. For additional information, please visit www.greenriver.edu/student-affairs/disability-support-services.htm. 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.

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