

# Microsoft Excel 2010: Advanced Skills

## By Sandra Rittman

### Preliminary Table of Contents

#### Lesson 1: Working with Tables, Lists, and Outlines

##### Why Use a Table?

##### Working with Tables

Table Rows

Table Columns

##### Creating a Table

Converting a Range to a Table

Creating a New Blank Table

Renaming a Table

Header Row

Total Row

Formatting a Table

Adding and Deleting Rows and Columns

Selecting Table Rows and Columns

Calculated Columns

Converting a Table to a Range

Printing a Table

Deleting a Table

##### Understanding Structured References

Formulas with Structured References

##### Using Enhanced Sorting and Filtering in Lists and Tables

Sorts

Filters

Custom Filters

##### Explore Number and Date Criteria Options

##### Using the Outline Feature

How Outlines Work

Auto Outline

Creating Groups Manually

##### Displaying Subtotals

Sorting the List

The Subtotal Dialog Box

#### Lesson 2: Adding Graphics to Worksheets

##### Using Illustrations with Excel

Design Principles

The Illustrations Group on the Ribbon

##### Inserting Pictures and Clip Art

Inserting a Picture from a File

Inserting Clip Art

Moving, Sizing, and Rotating Images

Scaling and Cropping Images

Adjusting Images and Special Effects

##### Getting into Shapes

Inserting Shapes

##### Introducing SmartArt

Using SmartArt

Adding Text to SmartArt

Formatting SmartArt

#### Lesson 3: Using Templates and Protecting Worksheets

##### Using Templates

Template Features

The New Workbook Dialog Box

Template Storage Locations

##### Customizing Templates

Creating Your Own Templates

Modifying Custom Templates

##### Protecting Workbooks and Worksheets

Protecting the Workbook Structure

Protecting Worksheet Elements

Password Protection

Protecting Cells

##### Creating Digital Signatures

When to Use a Digital Signature

Creating a Digital Certificate

Creating a Digital Signature

#### Lesson 4: Creating PivotTables and Macros

##### Creating PivotTables

PivotTable Example 1

PivotTable Example 2

How PivotTables Work

Formatting a PivotTable

Changing PivotTable Fields

Filtering the Display of Data Items

Filtering by Categories

Filtering a PivotTable Report

Editing PivotTable Calculations

Refreshing PivotTable Data

##### Creating PivotCharts

PivotChart Filter Pane

Formatting PivotCharts

##### Changing Macro Security

Security Levels

##### Recording Macros

Naming a Macro

Recording Macro Steps

Storing Macros

Saving a Workbook Containing Macros

##### Running Macros

##### Assigning Macros

Assigning Macros to Shortcut Keys

Assigning Macros to Custom Buttons

**Lesson 5: Using Financial Functions and Data Analysis**

**Creating Financial Functions**

PMT and FV Functions  
Financial Function Syntax

**Using Data Analysis Tools**

Using Goal Seek  
Using Solver  
Scenario Manager

**Lesson 6: Auditing and Additional Functions**

**Using 3-D Cell References in Formulas**

Why Use a 3-D Reference?  
Creating a 3-D Reference

**Introducing Lookup Functions**

Lookup Function Syntax  
How the VLOOKUP Function Works  
Specifying the Range Lookup Argument  
Sorting a Table Array

**Using the SUBTOTAL Function to Calculate Filtered Lists**

Filtering a List  
Creating Subtotal Formulas

**Creating Formulas Using Criteria IF Functions**

Function Syntax  
How the SUMIF Function Works  
How the COUNTIF Function Works

**Using Other Logical Functions in Formulas**

AND  
OR  
NOT  
IFERROR

**Using Formulas to Format Text**

Change Case of Text  
Replace Text  
Convert Text to Columns

**Tracing Formulas**

The Formula Auditing Tools  
Tracing Precedents  
Tracing Dependents

**Auditing Formula Errors**

Auditing Single Cells  
Error Checking in Multiple Cells  
Tracing Errors

**Evaluating Formulas**

**Lesson 7: Using Advanced Formatting and Analysis Tools**

**Working with Grouped Worksheets**

Grouping Worksheets  
Ungrouping Worksheets

**Consolidating Worksheet Data**

Consolidation Functions  
Types of Consolidation  
Creating Links to Source Data

**Working with Data Validation**

Creating Drop-Down Lists for Data Entry  
Restricting Data Entry in Cells

**Circling Invalid Data**

**Removing Duplicate Records**

**Using Data Tables**

One-Variable Data Tables  
Two-Variable Data Tables

**Creating Trendlines**

Creating Sparklines in Cells

**Lesson 8: Collaborating in Excel**

**Creating Folders in Excel**

Working with Project Folders  
Creating Folders  
Renaming Folders

Organizing Workbooks in Folders

**Inserting and Viewing Comments**

When to Use a Comment  
Viewing Comments  
Navigating Through Comments  
Setting the Username  
Inserting and Deleting Comments  
Adding to Comments  
Formatting Comment Text  
Positioning and Sizing a Comment  
Printing Comments

**Preparing Workbooks for Distribution**

Granting a User Permission to Edit  
Inspecting Workbooks for Personal Information and Hidden Data  
Marking a Workbook as Final

**Sharing Workbooks**

**Tracking Changes to Workbooks**

Example of Tracked Changes at Work  
Reviewing Tracked Changes  
The Change History

**Sharing Workbooks on a Network**

Characteristics of Shared Workbooks  
Simultaneous Access to Shared Workbooks  
Disabled Features in Shared Workbooks  
Switching Off Sharing

**Merging Multiple Workbooks**

Example of a Merge  
What Happens When Workbooks Are Merged  
Merged Cells Compared to Merged Workbooks  
Protecting Elements in a Shared Workbook

**Lesson 9: Integrating Excel with Other Programs**

**Maintaining Compatibility with Previous Versions of Excel**

About File Formats  
Excel 2010 Open XML File Formats  
Earlier Excel File Formats  
Checking for Excel Version Compatibility  
Using the Compatibility Pack  
Converters

**Converting Workbooks to Other File Formats**

Text file Formats  
Limitations of File Formats  
PDF and XPS File Formats

**Using Excel Tables with Word Mail Merge**

**Sharing Excel Data with Access**

**Inserting Excel Charts in PowerPoint**

Linking Compared to Embedding

**Office Web Apps**

Collaborating on Office Live Workspace  
The Excel Web App

**Importing External Data**

Using Copy and Paste  
Importing Data with Drag and Drop  
Importing a Text File

**Saving Workbook Elements as a Web Page**

Saving Selected Elements  
Republishing the Web Page

**Glossary**

**Index**