# Instructor’s Manual Exploring Microsoft Word 2019, Chapter 7

## Available Instructor Resources

|  |  |  |
| --- | --- | --- |
| **Resource** | **File Name** | **Found** |
| **Student Data Files** | [Various](#_PROJECTS_AND_EXERCISES), click link to see file list | Online Instructor Resource Center |
| **Solution Files** | [Various](#_PROJECTS_AND_EXERCISES), click link to see file list | Online Instructor Resource Center |
| **Answer Keys** |  | Online Instructor Resource Center |
| Matching | w07\_answerkey\_match.docx |
| Multiple Choice | w07\_answerkey\_mc.docx |
| Concepts Checks | w07\_answerkey\_concepts.docx |
| **Scorecards** | Various, example:  w07b2StockData \_scorecard.xlsx | Online Instructor Resource Center |
| **Scoring Rubrics** | none | Online Instructor Resource Center |
| **Annotated Solution Files** | Various, example:  w07h1References\_annsolution.pdf | Online Instructor Resource Center |
| **Scripted Lecture (Script)** | w07\_script\_instruction.docx | Online Instructor Resource Center |
| Scripted Lecture Data | w07\_script\_data1.docx  w07\_script\_data2.docx  w07\_script\_solution1.docx  w07\_script\_solution2.dotm |
| Scripted Lecture Solution | w07\_script\_solution3.docx |
| **PowerPoint Presentation** | w07\_powerpoint\_accessible.pptx | Online Instructor Resource Center |
| **Testbank** | w07\_testbank.docx | Online Instructor Resource Center |
| **Instructor's Manual (lesson plans incl.)** | w07\_instructormanual.docx | Online Instructor Resource Center |
| **Assignment Sheet** | w07\_assignsheet.docx | Online Instructor Resource Center |
| **Prepared Exam (Chapter & App)** |  | Online Instructor Resource Center |
| Prepared Exam-Chap instruction | w07\_exam\_chap\_instruction.docx |
| Prepared Exam-Chap Data | w07\_exam\_chap\_data.docx |
| Prepared Exam-Chap Solution | w07\_exam\_chap\_solution.dotm  w07\_exam\_chap\_sample\_solution.docx |
| Prepared Exam-Chap Annotated Sol. | w07\_exam\_chap\_annsolution.pdf |
| Prepared Exam-Chap Scorecard | w07\_exam\_chap\_scorecard.xlsx |
| **File Guide** | w07\_file\_guide.xlsx | Online Instructor Resource Center |
| **Objective Map** | w07\_objectivesmap.xlsx | Online Instructor Resource Center |
| **Grader Project** |  | Online Instructor Resource Center |
| Grader Instruction | w07\_grader\_instruction.docx |
| Grader Data | w07\_grader\_data.xlsx |
| Grader Solution | w07\_grader\_solution.xlsx |
| Grader Annotated Solution | w07\_grader\_annsolution.pdf |
| Grader Scorecard | w07\_grader\_scorecard.xlsx |

## CHAPTER OBJECTIVES

### When students have finished reading this chapter, they will be able to:

* Create an Electronic Form
* Enable Form Protection
* Create A Macro
* Understand Macro Security
* Apply Document Restrictions
* Work with Passwords
* Use A Digital Signature to Authenticate a Document

## CHAPTER OVERVIEW

In this chapter, the students will learn how to use forms, macros, and document security features to automate a Word document.

### The major sections in this chapter are:

1. **Forms.** In this section, students will learn how to create a form that can be used in print or completed onscreen, and how to insert and customize content controls, perform calculations in a form, and restrict editing of the document to areas of variable data.
2. **Macros.** In this section, students will learn how to create and modify a macro, and test it for accuracy.
3. **Document Protection and Authentication.** In this section, students will learn how to protect documents against unauthorized access, formatting or content changes, and mark a document as final, set passwords, and add digital signatures.

## CLASS RUN-DOWN

1. Have students turn in homework assignments.
2. Talk about the chapter using the discussion questions listed below.
3. Use a PowerPoint presentation to help students understand the chapter content.
4. [Run through the scripted lecture for the chapter. Give special attention to areas in which students might be challenged.](#_WHEN_USING_SCRIPTED)
5. Have students complete the Capstone Exercise for Word Chapter 7.
6. Use MyITLab for in-class work or to go over homework.
7. Give students the homework handout for the next class period.

## LEARNING OBJECTIVES

### At the end of this lesson students should be able to:

* Insert content controls
* Perform calculations with content control data
* Protect individual controls on a form
* Protect an entire form
* Complete an electronic form
* Record a macro
* Run a macro
* Modify a macro
* Work with security settings
* Mark a document as final
* Set formatting restrictions
* Set editing restrictions and exceptions
* Set a password
* Modify or delete a password
* Attach a digital signature to a document
* Add a signature line

## KEY TERMS

Check Box content control**–**Consists of a box that can be checked or unchecked.

Content control**–**Provides a location for entry of various types of variable data.

Date Picker content control**–**Displays a calendar that can you click rather than typing in a date.

Design Mode**–**Enables you to view and select control fields to allow for modifications to the control field layout or options.

Digital certificate**–**Verifies the identity of the sender and maintains the integrity of an electronic document through encryption and security safeguards.

Digital signature**–**An electronic stamp that guarantees the authenticity of a file, providing a verifiable identifier that is linked to the organization’s digital certificate.

Drop-Down List content control**–**Enables the user to choose from one of several existing entries, shown in a list format.

Form**–**A document designed to collect data.

Formatting restrictions**–**The identification of styles that should be made available while restricting access to all others.

Legacy Tools**–**Provides a set of controls that is accessible by both current and earlier Word versions.

Macro**–**Records a set of instructions that executes a specific task.

Plain Text content control**–**Enables the entry of text or numbers but allows only limited formatting.

Rich Text content control**–**Control that is often used to insert formatted text, images, and tables.

Signature line**–**Enables individuals and companies to distribute and collect signatures, then process forms or documents electronically without the need to print and fax or mail.

User exception**–**Comprises an individual or group that is allowed to edit all or specific parts of a restricted document.

Visual Basic for Applications (VBA)**–**Represents a macro in programming code.

## DISCUSSION QUESTIONS

* What could be the pros and cons of a business providing forms electronically to customers?
* What types of repetitive tasks can students identify that could be automated with a Word macro?
* What is an example of a document to which you might want to apply editing restrictions?

## WHEN USING SCRIPTED LECTURE IN CLASS, DEMONSTRATE HOW TO:

* Insert content controls
* Perform calculations with content control data
* Protect an entire form
* Complete an electronic form
* Record and run a macro
* Modify a macro
* Mark a document as final
* Set formatting restrictions
* Set editing restrictions and exceptions
* Set a password
* Add a signature line

## CONNECTIONS PRACTICAL PROJECTS AND APPLICATIONS

* Have students read the article below and have a class discussion on the pros and cons of the enterprise use of fillable forms:

<http://www.informationweek.com/strategic-cio/it-strategy/death-to-fillable-pdfs-and-ms-word-forms/a/d-id/1318239>

* Have a class discussion on the best practices in form design. Ask students to research the topic online before the class and bring examples of good and bad design to class.
* Have students visit the Microsoft site listed in Additional Web Resources *Information about digital certificates and signatures* and write a short essay on how to acquire a digital certificate.

## TEACHING NOTES

### Forms

In this section, students will learn how to create a form that can be used in print or completed onscreen, and how to insert and customize content controls, perform calculations in a form, and restrict editing of the document to areas of variable data.

#### Creating an Electronic Form

* Discuss the form settings defined by the form designer—layout, structure, and formatting.
* Explain that a form is often saved as a template with the file extension .dotx so that it can be reused.
* **Teaching Tips:** Demonstrate how to add the Developer tab to the ribbon.
* Discuss how content controls are inserted in a form for online data entry.
* Review the list of content controls in Table 7.1.
* Explain the difference between Rich Text and Plain Text content controls.
* Explain that content controls must be added in Design Mode and demonstrate how to toggle it on. Point out that the form controls cannot be tested in Design Mode.
* Demonstrate how to add a calculation to a form.
* **Teaching Tips:** Point out that if a form is likely to be used by users with earlier versions of Word, forms should be created using the Legacy Tools available on the Developer tab instead of the content controls.
* **Teaching Tips:** Explain that ActiveX controls are designed for online forms.
* **Teaching Tips:** Point out that a form design must consider the end use of the form and the version of Word that the users will have. Content controls will be converted to text in versions of Word prior to 2007.
* **Teaching Tips:** Discuss how controls may be placed in a table in order to have more control over the layout of the form. The tab order of the form should also be considered when adding the field controls.

#### Enabling Form Protection

* Discuss the different approaches to form protection—allowing data entry only in certain fields, protecting other fields so they cannot be deleted, protecting an entire form, or adding a password to a form template.
* Explain that a form template is opened in Word, filled out, and then saved as a Word document.
* **Teaching Tips:** Emphasize to students that once a form is password-protected, if the password is forgotten or lost, the form is permanently unavailable.
* **Teaching Tips:** Explain that if a form has drop-down list or combo box controls, the options will not be displayed on a printed form.

**Macros**

In this section, students will learn how to create and modify a macro, and test it for accuracy.

#### Creating a Macro

* Explain how a macro is used to automate repetitive tasks in Word.
* Discuss how a macro is recorded, named, and is stored in either the current document or is available in all documents. Macros can also be assigned a shortcut key or accessed from a button on the Quick Access Toolbar.
* Discuss how a macro is written in VBA, and that the code can be modified in the VB editor if students are familiar with the code.
* **Teaching Tips:** Point out that macro names should be descriptive and cannot contain spaces or unusual characters.
* **Teaching Tips:** Explain that when recording a macro, students can enter text that will be included in the macro such as entering a header or footer; however, text must be selected with the keyboard rather than with the mouse, as the macro recorder does not recognize the mouse.
* **Teaching Tips:** Tell students to be sure and make a copy of a document before running a macro, in case the macro makes unintended changes to the document.
* **Teaching Tips:** Explain that a Word document with macros should be saved as a Word Macro-Enabled Document with a .docm extension, and that this will ensure that the macro is available when the document is opened.

#### Understanding Macro Security

* Emphasize to students that a virus or other malicious program can be disguised as a Word macro, and caution is needed when downloading documents from online sources.
* Explain that the default setting in Word is to disable all macros but that the settings can be changed if needed. Review the macro security settings in Table 7.2.
* **Teaching Tips:** Point out that documents downloaded from an online source open in Protected View, but students can enable the content if they trust the document source.

### Document Protection and Authentication

In this section, students will learn how to protect documents against unauthorized access, formatting or content changes, and to mark a document as final, set passwords, and add digital signatures.

#### Applying Document Restrictions

* Discuss the different reasons for restricting a Word document, such as securing text or formatting that should not be changed, or allowing editing only to specific users.
* Explain the use of formatting and editing restrictions and demonstrate the options available on the Developer tab. Review the editing restrictions in Table 7.3.
* Discuss the use of the Microsoft Information Rights Management service to verify those individuals who can access documents containing sensitive or confidential information.
* **Teaching Tips:** Explain that the Mark as Final command does not actually prevent changes to a document; it simply designates the file status as read-only until someone removes that status.
* **Teaching Tips:** Point out that some of the options for restricting document access are available on the File tab, under Info/Protect Document.

#### Working with Passwords

* Discuss how passwords are useful to restrict access to sensitive documents or when a document is stored on a network drive.
* Explain that password protection can be applied to the entire document so that it can only be opened with the password, or to allow users to modify content in a read-only file.
* **Teaching Tips:** Be sure students understand that a strong password uses a combination of letters, numbers, and symbols, and that a document password is case-sensitive.
* **Teaching Tips:** Explain that both types of passwords can be assigned to the same document—one to protect the entire document and another to give a user the choice to open as a read-only document or to modify content.
* **Teaching Tips:** Tell students that it is good practice to change passwords periodically, and that they should take care to write down all passwords in a secure location.

#### Using a Digital Signature to Authenticate a Document

* Point out that in some circumstances, document recipients must be assured of the origin of a document for its authenticity.
* Explain how a digital certificate can be used to verify the identity of a document sender and how a digital signature guarantees the authenticity of the document.
* Discuss how a signature line can be combined with the use of a digital signature to allow an organization to process forms or documents electronically.
* **Teaching Tips:** Point out that a digital signature is valid as long as the document is not modified and it should be attached only when the document is ready for distribution.

## OBJECTIVE TESTS IN MYITLAB

To find an objective test to help your students practice for tests, have them sign in to MyITLab:   
[www.myitlab.com](http://www.myitlab.com).

## ADDITIONAL WEB RESOURCES

1. Creating forms that users complete or print in Word:  
   <https://support.office.com/en-us/article/Create-forms-that-users-complete-or-print-in-Word-040c5cc1-e309-445b-94ac-542f732c8c8b>
2. About Content Controls: <https://support.office.com/en-us/article/About-content-controls-283b1e29-0b77-4781-b236-2d02c1cce1c2>
3. Enable or disable macros in Office files:  
   <https://support.office.com/en-us/article/Enable-or-disable-macros-in-Office-files-12b036fd-d140-4e74-b45e-16fed1a7e5c6>
4. Digital signatures and certificates:

<https://support.office.com/en-us/article/Digital-signatures-and-certificates-8186cd15-e7ac-4a16-8597-22bd163e8e96>

## PROJECTS AND EXERCISES

|  |  |  |
| --- | --- | --- |
|  | **Data file** | **Save As** |
| Hands-On Exercise 1 | w07h1Invoice.docx | w07h1Invoice\_LastFirst.docx |
| Hands-On Exercise 2 | w07h1Invoice\_LastFirst.docx | w07h2Invoice\_LastFirst.dotm |
| Hands-On Exercise 3 | w07h3Tulip.docx | w07h3Tulip\_LastFirst.docx |
| Practice Exercise 1 | w07p1Dinner.docx | w07p1Dinner\_LastFirst.docm |
| Practice Exercise 2 | w07p2Service.docx | w07p2Service\_LastFirst.docm |
| Mid-Level Exercise 1 | w07m1Appraisal.docx | w07m1Appraisal\_LastFirst.docx |
| Mid-Level Exercise 2 | w07m2Assignments.docx | w07m2Assignments\_LastFirst.dotm |
| Running Case | w07r1NewCastle.docx | w07r1NewCastle\_LastFirst.dotm |
| Disaster Recovery | w07d1Problem.dotx | w07d1Problem\_LastFirst.dotx |
| Capstone | w07c1Pets.docx | w07c1Pets\_LastFirst.docm |

## CHAPTER REVIEW/ANSWERS TO END OF CHAPTER MATERIAL

### Key Terms Matching Answer Key

1. Enables you to view and select control fields to allow for modifications to the control field layout or options.

**D. Design Mode**

2. Provides a location for entry of various types of variable data.

**B. Content Control**

3. Consists of a box that can be checked or unchecked.

**A. Check Box Content Control**

4. Enables the user to choose from one of several existing entries, shown in a list format.

**G. Drop-Down List Content Control**

5. Displays a calendar that a user can click rather than typing in a date.

**C. Date Picker Content Control**

6. A document designed to collect data.

**H. Form**

7. Provides a set of controls that are accessible by both the current and earlier Word versions.

**J. Legacy Tools**

8. Records a set of instructions that executes a specific task.

**K. Macro**

9. The identification of styles that should be made available while restricting access to all others.

**I. Formatting Restrictions**

10. Represents a macro in programming code.

**P. Visual Basic for Applications (VBA)**

11. Comprises an individual or group that is allowed to edit all or specific parts of a restricted document.

**O. User Exception**

12. Enables the entry of text or numbers but allows only limited formatting.

**L. Plain Text Content Control**

13. Verifies the identity of the sender and maintains the integrity of an electronic document through encryption and security safeguards.

**E. Digital Certificate**

14. Electronic stamp that guarantees the authenticity of a file, providing a verifiable identifier that is linked to the organization’s digital certificate.

**F. Digital Signature**

15. Enables individuals and companies to distribute and collect signatures, then process forms or documents electronically without the need to print and fax or mail.

N**. Signature Line**

16. Control that is often used to insert formatted text, images, and tables.

M**. Rich Text Content Control**

### Multiple Choice Answer Key

1. You can create a password to provide access to restricted areas of a form. In doing so, you must consider that:

**b. If you forget the password, the form is permanently unavailable.**

2. Why might you occasionally choose to modify Word’s security settings related to opening a document that includes macros?

**c. So that if you trust the source of a macro you do not need to enable the document each time you open it.**

3. Why might a total field on a form not show a total, even though data has been entered in fields that are to be summed?

**d. Fields associated with the total are not set to calculate on exit.**

4. The Mark as Final feature:

**a. enables you to designate a document as a read-only file.**

5. As related to form design, a content control is used to:

**c. provide a placeholder for variable data that a user will supply.**

6. How does a digital signature help validate a document’s authenticity?

**a. It confirms through electronic encryption that the information is valid and has not been changed after signing.**

7. Why would you consider changing a field’s instructional text?

**a. To more clearly define a field’s intended contents.**

8. Which of the following is the least appropriate advice to give to someone who wants to learn to create and run macros?

**c. Change your macro security settings to enable all macros all the time.**

9. Which two ribbon tabs include commands that enable you to record and modify macros?

**d. Developer and View**

10. To modify Word’s security settings related to macros, you can make selections in the:

**b. Trust Center.**

### Quick Concept Check Answer Key

**1. Describe the different considerations required in developing a form that will be printed out versus a form that will be accessed digitally.**A form designed to be printed would include formatting, labels, and blank spaces for writing data. A form designed in electronic format would also include formatting and labels, but instead of blank spaces, the form would have content controls. A content control enables a user to enter data electronically instead of writing data in a blank space. Some content controls enable a user to select from a drop-down list or to select a date from a calendar.

**2. Explain the purpose of using a bookmark when creating a field to be used in a calculation.**A bookmark name applies a unique moniker to a field in a form so that the field can be referred to by a calculation or other operation.

**3. Describe areas of a form that are typically protected and provide rationale for such protection.**Most often, a form is designed for user input in labeled areas. While labels and other formatting should be unavailable, or protected, to maintain the integrity of the form, areas of user input should be made available. Other types of protection include restricting changes made to formatting or requiring that a content control not be deleted. In all cases, a form is designed for electronic data entry or completion in written form, so various levels of protection are available to ensure that a form remains usable.

**4. Explain the purpose of developing macros.**A macro automates a series of keystrokes or commands and is especially useful when such tasks are likely to be repeated. When a macro is reused in such a way, it is likely to save a great deal of time that would otherwise be spent repeating the same steps.

**5. Explain why it is a good idea to save a document before running a macro.**Because a macro is usually designed to in some way modify a document, it is possible that unexpected results can occur during development and testing of the macro. So that those changes do not modify the document in a way that requires time in reconstructing, it is recommended that you save a document before beginning macro development.

**6. Explain why enhanced security is necessary for documents that contain macros.**A macro is actually program code in which keystrokes and activities are recorded and saved. A virus, or other destructive series of statements, is also a coded program that could be disguised as a macro. When innocently run, the code could wreak havoc. Word provides a level of security that disables documents containing macros but provides the option for a user to enable the macro if it is a trusted item or if the risk is determined to be low.

**7. Explain how you can restrict editing to a group of users and how they can be identified as belonging to the group.**For various purposes, you may want to restrict editing of certain parts of a document to only a select group of people. First, open the Restrict Editing pane, click the Editing restrictions check box, and indicate the editing type to allow. Then select document text that you want to make available to the select group. Choose to make the selection available to Everyone or click More users and type user names, domains, or email addresses.

**8. Compare encrypting with a password and applying a password without encryption.**When you require a user to type a password to open a document, you can design the password with or without encryption. An unencrypted password is similar to locking important papers in a safe. If a user has the key—in this case, the password—the document is available. Encrypting a password is similar to shredding the papers before placing them in the safe. Not only is a password necessary, but the document must be reassembled behind the scenes before it is available. The more complete level of protection, then, is password encryption.

**9. Provide rationale for using a digital signature, describing its use in verifying a sender’s identify.**A digital signature guarantees the authenticity of a file, providing a verifiable identifier that is linked to the organization’s digital certificate. It confirms that the document is valid and has not been changed after it was signed.