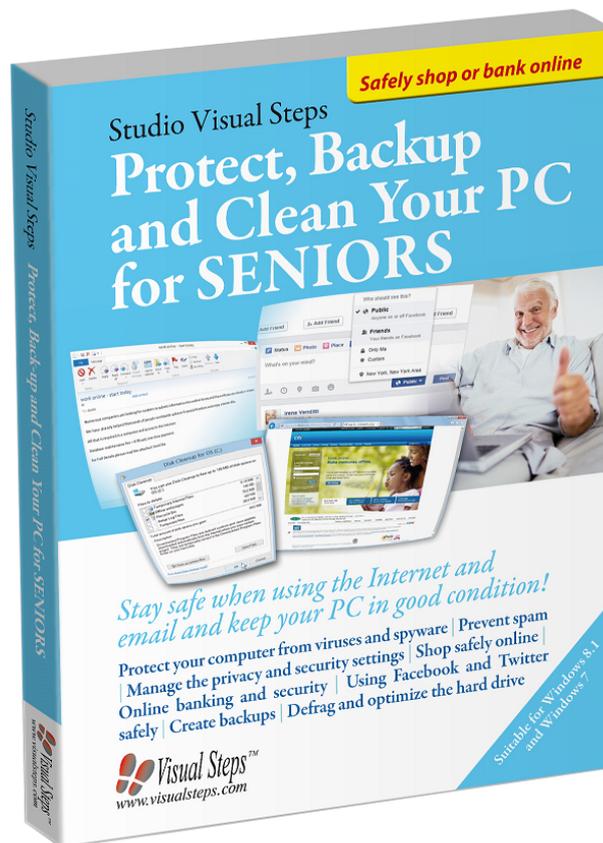


# Teachers' Manual

for

## Protect, Backup and Clean Your PC for Seniors



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 **Visual Steps**<sup>TM</sup>  
[www.visualsteps.com](http://www.visualsteps.com)

## 1. Introduction

This course manual assumes a lesson structure consisting of nine points. These points have been divided into three groups. Each class period will generally have the following structure:

- A Introduction**
1. Make sure the students are ready for class to begin.
  2. Explain this lesson's objectives.
  3. Review any necessary background knowledge.
- B Instruction**
1. Present the subject matter.
  2. Help the students learn the material.
  3. Have the students demonstrate the requested techniques.
  4. Give feedback on the demonstrations.
- C Conclusion**
1. Assess the final results of the learning process (testing).
  2. Recap and demonstrate uses for what's been learned.

This lesson structure should be followed step-by-step from start to finish. Steps B1 through B4 will be frequently repeated, as the subject matter will be offered in small chunks (B1).

This means there will be many points at which the student might need some help (B2).

This also means that during a class, students will learn multiple techniques they can demonstrate (B3), to which the instructor should respond with approval or corrective comments as needed (B4).

On the next page you will see the **lesson structure** again, this time expanded with extra information to clarify the content of and "why" behind each step. This structure will also be followed in explaining the details for the seven class meetings later in this manual. You can split the lessons which cover a longer chapter if needed. You may wish to handle the material in these chapters in separate sessions. Or you can combine some lessons if you want to.

Plan to use the available class time as follows:

- Introduction 10-15%
- Instruction 60-70%
- Conclusion 20-25%

## Lesson Structure

### A Introduction **1. Make sure the students are ready for class to begin.**

The instructor can ask for silence, close the door, write an announcement on the board, or in some other way draw attention to the coming lesson.

### **2. Explain this lesson's objectives.**

It is important for both student and instructor to know exactly what a lesson's desired results are. The student's work attitude, for example, depends upon whether he needs to recognize, commit to memory, or apply the material being presented.

Simply listing the subjects that will be covered is not enough. The instructor must explain them in recognizable terms.

### **3. Review any necessary background knowledge.**

At the start of each lesson, the instructor should make sure the new information will connect to and build upon previously acquired concepts and skills. In order to do so, the instructor must first help the students recall (activate) the relevant knowledge.

### B Instruction **1. Present the subject matter.**

The heart of the learning process is the offering of information by the instructor or by the textbook.

### **2. Help the students learn the material.**

The instructor doesn't stand at the front of the class during the learning process, but rather moves around, observing the students' activities and offering support where necessary. The didactic approach being applied can be characterized as guided experiential learning.

### **3. Have the students demonstrate the requested techniques.**

The point here is not to check whether students have done their homework, but rather to provide an opportunity for practicing the desired (final) techniques. Specific questions will give the students the opportunity to demonstrate to themselves and to the instructor that they understand or can apply the information.

### **4. Give feedback on the demonstrations.**

It's instructive and reinforcing to provide students with feedback on their demonstrations of what they've learned.

Feedback on a student's execution of techniques often occurs naturally: it either works or it doesn't. In any case, feedback should provide information about correct execution of the techniques that are visible during the learning process.

**C Conclusion 1. Assess the final results of the learning process.**

The point of this step is to determine whether the student has accomplished the educational objectives, and whether he can execute the desired techniques with confidence. There are various forms of testing available for this: completing an exercise, for example, or answering questions. They don't all have to be given at the same time. Naturally, the tests should be tailored to the stated educational objectives.

**2. Recap and demonstrate uses for what's been learned.**

This last step is focused on helping the material sink in for the long term. As a result, this information should bridge multiple lessons and focus on making connections among different topics.

## 2. Previous Knowledge

If you want to use this book, your students will need some basic computer skills. If they do not have these skills, it is a good idea to read one of the following books first:

**Windows 8.1 for SENIORS** – ISBN 978 90 5905 118 8  
[www.visualsteps.com/windows8](http://www.visualsteps.com/windows8)

**Windows 7 for SENIORS** – ISBN 978 90 5905 126 3  
[www.visualsteps.com/windows7](http://www.visualsteps.com/windows7)

## 3. General

**Technical matters** such as proper installation of *Windows 8.1*, *7*, and an active Internet connection are essential for this course. The Internet connection is necessary to install *Microsoft Security Essentials* and some other programs. If *Microsoft Security Essentials* isn't installed yet on the *Windows 7* PC of your student, they need to download it first. For more information, you can discuss *Appendix B Downloading Microsoft Security Essentials* at the end of the book during the lesson.

## 4. Lesson Plan

There are four lessons, covering Chapters 1 through 4.

**Lesson 1** Chapter 1 Protecting Your Computer

**Lesson 2** Chapter 2 Safeguarding Your Privacy

**Lesson 3** Chapter 3 Creating Backups

**Lesson 4** Chapter 4 Cleaning Up Your Computer

If desired, you can split or combine lessons and/or prolong lessons.

## First Meeting

### A Introduction 1. Make sure the students are ready for class to begin.

See the general lesson structure.

### 2. Explain this lesson's objectives.

**Present the following information first, writing the words in bold somewhere in large letters so that everyone can see them well (on a blackboard, for example).**

It is essential that your **computer** is **protected** when it is connected to the Internet. Adequate security measures will reduce the risk of your computer becoming infected by *malware* (viruses or any other type of harmful software).

It can be very frustrating if your computer becomes infected by viruses. Not just for you, but for others too. If your computer has been infected, it can also infect other computers. This can happen without you even noticing it, when you send an email or share files, for example.

As a computer user, you are responsible for protecting your own computer. Above all, it is important that you keep your *Windows* version *updated* and all other programs that are used on a regular basis as well. This means that a new, enhanced version of the program will be installed. **Updating** will also solve any recent security problems.

*Windows 8.1* will help you protect your computer with the **Windows Defender** program. *Windows 7* uses **Microsoft Security Essentials** for protection. Another security tool offered by *Windows* is the **Action Center**. In the **Action Center** you can check the security settings for the *Windows* version on your computer and adjust them, if necessary. You can also check to see if **Windows Firewall** has been enabled. This is a protective service that will eliminate unwanted access from others.

It is also important that you enable the **security options** for your **Internet browser** programs, such as *Internet Explorer*. This will prevent *phishing websites* from making attacks, among other things. A *phishing website* will often display false information in order to obtain important personal data, such as the access codes for your Internet banking services.

**Add-ons**, also called **plugins**, add extra functionality to an Internet browser. Usually they work quite well, but they can also cause problems. That is why it is useful for you to learn how to manage your add-ons.

**In this lesson, you'll learn:**  
**(also write this somewhere that's easy for the students to read)**

- what malware is;
- how to update *Windows*;
- how to update other software programs;
- more about antivirus software;
- how to work with the *Action Center*;
- how to work with *Windows Defender* in *Windows 8.1*;
- how to work with *Microsoft Security Essentials* in *Windows 7*;
- how to use *Windows Firewall*;
- what phishing is;
- how to enable the anti-phishing options in an Internet browser;
- how to enable other security options in an Internet browser;
- how to work with add-ons or plugins in Internet browsers.

**3. Review any necessary background knowledge.**

Since this is the first class, you can't refer back to previous classes.

**B Instruction 1. Present the subject matter.**

Pages 15-57.

**2. Help the students learn the material.**

See the general lesson structure.

**3. Have the students demonstrate the requested techniques.**

See the general lesson structure.

**4. Give feedback on the demonstrations.**

See the general lesson structure.

**C Conclusion 1. Assess the final results of the learning process.**

Briefly discuss any frequently occurring problems you observed during B Instruction.

**2. Recap and demonstrate uses for what's been learned.**

Go back to the objectives and read them out loud again. Encourage the students to practice the information and skills they've learned at home.

**Extra material** Background information and Tips on pages 58-64.

## Second Meeting

### A Introduction 1. Make sure the students are ready for class to begin.

See the general lesson structure.

### 2. Explain this lesson's objectives.

**Present the following information first, writing the words in bold somewhere in large letters so that everyone can see them well (on a blackboard, for example).**

In the first lesson you have learned about protecting your computer against malicious external influences. In this lesson we explain how to use the **Internet** in a **safe** manner. Nowadays, the Internet is not only used for sending email and searching for information, but it has become the main medium for shopping, conducting financial transactions, and contacting others through social network sites.

During all these activities you leave all sorts of traces on the Internet, deliberately but also unknowingly, which can endanger your privacy. In this lesson you will find lots of useful information and tips that will help you **protect your privacy while using the Internet**.

**In this lesson, you'll learn how to do the following:  
(also write this somewhere that's easy for the students to read)**

- recognize what spam is, and how to prevent it;
- deal with cookies;
- change the privacy settings in Internet browsers;
- delete your browser history;
- create strong passwords and remember them;
- safely conduct your Internet banking business;
- safely shop and pay online;
- safely use *Facebook*, *Twitter*, and other social media.

### 3. Review any necessary background knowledge.

Briefly review the material from the previous class, for instance:

- what malware is;
- how to update *Windows*;
- how to update other software programs;
- more about antivirus software;
- how to work with the *Action Center*;
- how to work with *Windows Defender* in *Windows 8.1*;
- how to work with *Microsoft Security Essentials* in *Windows 7*;
- how to use *Windows Firewall*;
- what phishing is;

- how to enable the anti-phishing options in an Internet browser;
- how to enable other security options in an Internet browser;
- how to work with add-ons or plugins in Internet browsers.

**B Instruction 1. Present the subject matter.**

Pages 65-112.

**2. Help the students learn the material.**

See the general lesson structure.

**3. Have the students demonstrate the requested techniques.**

See the general lesson structure.

**4. Give feedback on the demonstrations.**

See the general lesson structure.

**C Conclusion 1. Assess the final results of the learning process.**

Briefly discuss any frequently occurring problems you observed during B Instruction.

**2. Recap and demonstrate uses for what's been learned.**

Go back to the objectives and read them out loud again. Encourage the students to practice the information and skills they've learned at home.

**Extra material** Background information and Tips on pages 113-122.

## Third Meeting

### A Introduction 1. Make sure the students are ready for class to begin.

See the general lesson structure.

### 2. Explain this lesson's objectives.

**Present the following information first, writing the words in bold somewhere in large letters so that everyone can see them well (on a blackboard, for example).**

If your computer contains photos, legal documents, or other files of vital importance, it is essential that you back these up on a regular basis. In this way, you will always have a copy of this data in case something happens to your computer. You may experience a malfunction, an infection by malware, a fire, theft, short-circuiting, or even an accidental deletion of your own which triggers the loss of data.

The **Windows backup program** has several options for **creating backups**. You can create a backup of the entire hard drive and all its settings for example, or just a backup of important, personal files.

In the past, backups were stored on floppy disks, CDs, or DVDs. These types of storage media had one big disadvantage, you could not save a lot of information on them. Larger backups soon required multiple disks, CDs, or DVDs. Since the arrival of the *external hard drive* everything has changed. Nowadays, you can also save your backups online, in the *cloud*.

You can use **restore points** to restore the *Windows* settings to a previous state, in case you experience problems with the stability of your computer.

**In this lesson, you'll learn how to do the following:  
(also write this somewhere that's easy for the students to read)**

- create a backup copy;
- restore a backup;
- create restore points and restore them.

### 3. Review any necessary background knowledge.

Briefly review the material from the previous class, for instance:

- recognize what spam is, and how to prevent it;
- deal with cookies;
- change the privacy settings in Internet browsers;
- delete your browser history;

- create strong passwords and remember them;
- safely conduct your Internet banking business;
- safely shop and pay online;
- safely use *Facebook*, *Twitter*, and other social media.

**B Instruction 1. Present the subject matter.**

Pages 123-159.

**2. Help the students learn the material.**

See the general lesson structure.

**3. Have the students demonstrate the requested techniques.**

See the general lesson structure.

**4. Give feedback on the demonstrations.**

See the general lesson structure.

**C Conclusion 1. Assess the final results of the learning process.**

Briefly discuss any frequently occurring problems you observed during B Instruction.

**2. Recap and demonstrate uses for what's been learned.**

Go back to the objectives and read them out loud again. Encourage the students to practice the information and skills they've learned at home.

**Extra material** Background information and Tips on pages 160-167.

## Fourth Meeting

### A Introduction 1. Make sure the students are ready for class to begin.

See the general lesson structure.

### 2. Explain this lesson's objectives.

**Present the following information first, writing the words in bold somewhere in large letters so that everyone can see them well (on a blackboard, for example).**

A lot of data is temporarily stored or cached on your computer. Every now and then, it is a good idea to **remove this unnecessary data**.

You can use **Disk Cleanup** to delete superfluous files from your hard drive. **Optimize Drives** (in *Windows 8.1*) or **Disk Defragmenter** (in *Windows 7*) enhance the performance of your computer by collecting files and remnants of files that have spread out all over your computer. These tools will remove superfluous files and rearrange others in an optimal order so that *Windows* can find them more quickly. The computer will then work more efficiently.

The speed of your computer is determined by its components. Programs always require a certain minimum level of performance from these components in order to work properly. In *Windows* you can view the components that make up your computer and see how they perform. If desired, you can use this information to upgrade your computer by purchasing better components.

Besides the tools that come with *Windows*, you can also use other utility software to clean up your computer. For instance, the free **CCleaner program** will help you quickly and safely clean up your computer.

When you turn on your computer, a number of programs will start up automatically along with *Windows*. Some of these programs are important, such as an antivirus program. But sometimes they are less essential. By **managing** these **startup programs** with *CCleaner*, you can make your computer startup a little faster and work more efficiently.

**In this lesson, you'll learn how to do the following:  
(also write this somewhere that's easy for the students to read)**

- clean up the hard drive;
- uninstall programs;
- work with *Check Disk*;
- defrag or optimize a drive;
- view and use system info;

- clean up with *CCleaner*;
- manage startup programs with *CCleaner*.

### **3. Review any necessary background knowledge.**

Briefly review the material from the previous class, for instance:

- create a backup copy;
- restore a backup;
- create restore points and restore them.

#### **B Instruction 1. Present the subject matter.**

Pages 169-195.

#### **2. Help the students learn the material.**

See the general lesson structure.

#### **3. Have the students demonstrate the requested techniques.**

See the general lesson structure.

#### **4. Give feedback on the demonstrations.**

See the general lesson structure.

#### **C Conclusion 1. Assess the final results of the learning process.**

Briefly discuss any frequently occurring problems you observed during B Instruction.

#### **2. Recap and demonstrate uses for what's been learned.**

Go back to the objectives and read them out loud again. Encourage the students to practice the information and skills they've learned at home.

**Extra material** Background information and Tips on pages 196-202.

## 5. Other Course Material

Each Visual Steps book is also optimized for classroom use.

If you would like to be informed about the Visual Steps books, please sign up for the Visual Steps newsletter. Our newsletter will inform you about forthcoming books, additional chapter supplements, tips and tricks, special offers and more. Your details will not be used for any purpose other than to send you our newsletter and each newsletter contains a one-click link, allowing you to unsubscribe at any time.

Teachers' manuals will also become available for these books. For more information, please visit **[www.visualsteps.com/instructor](http://www.visualsteps.com/instructor)**