

## Business Computer Applications



# BUSINESS COMPUTER APPLICATIONS

Amy Savoury; Abigail Rusu; and Joy Perrin

NSCC

Nova Scotia



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# ABOUT THE BOOK

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# INTRODUCTION

This core Computer Usage and Applications text provides a survey of computer skills necessary to succeed in professional and academic careers. This includes a survey of Operating Systems, Microsoft Office applications such as Word, Excel, Access and PowerPoint, as well as Google Apps. There is a focus on analyzing and solving business problems in the most efficient way possible. Students are given clear, easy-to-follow instructions for each skill presented and are also provided with opportunities to learn additional skills related to the personal and professional objectives presented. Students will learn the objectives with detailed instruction in the 'Learn It' and 'Practice' assignments; and expand their knowledge with 'Master' and 'Challenge It' activities. Students are challenged to use critical thinking to solve real world scenarios. For example, 'fix-it' case studies are included so students gain an appreciation for the real world application of these technologies.

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# CHAPTER 1: OPERATING SYSTEMS

## Objectives



- Accessing websites
- Accessing and managing folders
- Downloading MS Office
- Setting up your MS Office account



# LEARN IT



An operating system (OS) is important software that runs on a computer. It manages the computer's memory and processes, as well as all of its software and hardware. It also allows you to communicate with the computer without knowing how to speak the computer's language. Without an operating system, a computer is useless.

The computer's operating system (OS) manages all of the software and hardware on the computer. Most of the time, there are several different computer programs running at the same time, and they all need to access your computer's central processing unit (CPU), memory, and storage. The operating system coordinates all of this to make sure each program gets what it needs.

Operating systems usually come pre-loaded on any computer you buy. Many people choose the computer they buy based on the operating system, but it's possible to upgrade or even change operating systems. The operating system consists of many smaller programs, stored as system files, which transfer data to and from the disk and transfer data in and out of your computer's memory. Other functions performed by the operating system include hardware-specific tasks such as checking to see if a key has been pressed on the keyboard and, if it has, displaying the appropriate letter or character on the screen.

Most operating systems use a graphical user interface, or **GUI** (pronounced goo-ee). A GUI lets you use your mouse to click icons, buttons, and menus. Everything is clearly displayed on the screen using a combination of graphics and text.

## **Functions of an operating system include:**

- **Booting**
  - Booting is the process of turning on the computer and powering up the system.
- **Memory management**
  - This is the process of controlling and coordinating the computer applications and allocating space for programs.
- **Loading and execution**



Woman using laptop in bed via Unsplash.

- Your OS will load, or start-up, a program and then execute the program so that it opens and runs.
- **Data security**
  - The OS is in charge of keeping data safe inside your computer and computer programs. They set up security features that keep unwanted cyberattackers at bay.
- **Disk management**
  - This manages all the drives installed in a computer like hard drives, optical disk drives, and flash drives. Disk management can be used to divide disks, format drives, and more.
- **Process management**
  - Your OS has to allocate resources to different processes on the machine, enable the processes to share information, protect them, and synchronize them
- **Device controlling**
  - Your OS will allow you to open or block access to devices like removable devices, CD/DVDs, data transfer devices, printers, USBs, and others.
- **Printing controlling**
  - Simply put, your OS takes control of the printers that are connected to the computer, and the materials that need to be printed.
- **User interface**
  - A user interface or UI refers to the part of the OS that allows a user to enter and receive information. This can be done with typed commands, code, and others.

### Common Operating Systems:

- Microsoft Windows
- Linux
- Apple iOS

### Mobile vs. computer



Mobile devices, like smartphones and tablets, may use different operating systems than computers. Computer and mobile OSs are different because they are developed for different uses. Computer systems will have to store lots of complex data, have a different user interface, and be prepared for printing, removable disks, a mouse and keyboard. They feature a desktop and a control panel for users to manage all of their information. Computer operating systems have been around longer, and therefore are more familiar.

Mobile devices don't feature a desktop that's the same as a computer desktop. Their user interface is much more about simple moves, things you can do with your fingers or voice, and a simple interface. Mobile OS also allows the user to watch movies, browse the Web, manage calendars, and play games. Examples of mobile operating systems include Apple iOS and Google Android. **Touch screen interfaces**, like those used on smartphones and mobile devices are becoming increasingly popular and some newer Operating Systems are touch screen compatible.

Since Microsoft Windows holds the vast majority of the business market share, we will primarily focus on Microsoft going forward.

### Windows 10

**Windows 10** is an operating system developed by Microsoft Corporation that works with mobile computing devices and also with traditional desktop and laptop PCs.

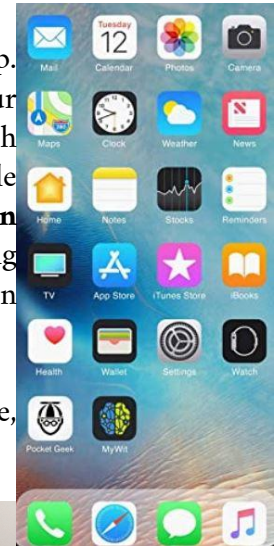
The three major tasks of Windows 10 are to:

- Manage your computer's hardware—the printers, scanners, disk drives, monitors, and other hardware attached to it.
- Manage the application software installed on your computer—programs like those in Microsoft Office and other programs you might install to edit photos and videos, play games, and so on.
- Manage the **data** generated from your application software. Data refers to the documents, worksheets, pictures, songs, and so on that you create and store during the day-to-day use of your computer.

The Windows 10 operating system continues to perform these three tasks, and additionally is optimized for touchscreens; for example, tablets of all sizes and convertible laptop computers. Windows 10 works equally well with any input device, including a mouse, keyboard, touchscreen, and **pen**—a pen-shaped stylus that you tap on a computer screen.

Windows 10 Operating System manages **programs** and applications that run on a computer. A **program** is a set of instructions that a computer uses to accomplish a task. A computer program that helps you perform a task for a specific purpose is referred to as an **application**. As an example, there are applications to create a document using word processing software, to play a game, to view the latest weather report, to edit photos or videos, or to manage financial information.

As we learned earlier, an operating system is a specific type of computer program that manages the



other programs on a computing device such as a desktop computer, a laptop computer, a smartphone, a tablet computer, or a game console. You need an operating system to:

- Use application programs.
- Coordinate the use of your computer hardware such as a keyboard, mouse, touchpad, touchscreen, game controller, or printer.
- Organize data that you store on your computer and access data that you store on your own computer and in other locations.

Windows 10, uses a graphical user interface—abbreviated as *GUI*. A graphical user interface uses graphics such as an image of a file folder that you click to activate the item represented. A GUI commonly includes the following:

- A **pointer**—any symbol that displays on your screen in response to moving your mouse and with which you can select objects and commands.
- An **insertion point**—a blinking vertical line that indicates where text will be inserted when you type or where an action will take place.
- A **pointing device**, such as a mouse or touchpad, to control the pointer.
- **Icons**—small images that represent commands, files, applications, or other windows.
- **Desktop**—a simulation of a real desk that represents your work area; here you can arrange icons such as shortcuts to programs, files, folders, and various types of documents in the same manner you would arrange physical objects on top of a desk.

In Windows 10, you also have a **Start menu** with tiles that display when you click the Start button in the lower left corner of your screen. The tiles serve as an inter-connected dashboard to all of your important programs, sites, and services. On the Start menu, your view is tailored to your information and activities. The Windows 10 Start menu is a table of contents to all the apps (programs), folders and contacts you use often. In **Desktop mode**, all the app icons appear in an alphabetical list on the left side of the screen, and they can be made to appear on the right side as tiles. To open the Start menu—which contains all your apps, settings, and files—do either of the following:

1. On the left end of the taskbar, select the Start icon.
2. Press the Windows logo key on your keyboard.

Depending on your desktop configuration, you may see a search box with ‘Type to search’. This is one way to access Cortana. **Cortana** is a voice-enabled virtual assistant developed by Microsoft to help Windows 10 users initiate requests, complete tasks and anticipate future needs by surfacing relevant data in a personal context.

The hardware of your computer such as the central processing unit (CPU), memory, and any attached devices such as a printer, are collectively known as **resources**. The Windows operating system keeps track of the status of each resource and decides when a resource needs attention and for





how long. Application programs enable you to do work on, and be entertained by, your computer—programs such as Word and Excel found in the Microsoft Office suite of products, Adobe Photoshop, and computer games. The operating system ensures all of these programs work together in the most efficient way possible.

One of the most often used functions of the operating system is **data management**, or the managing of your files and folders. Just like the importance of keeping your paper documents and file folders organized so that you can find information when you need it, organizing your computer files and folders is to group your files so that you can find information easily. This is a critical computing skill. After all, are files useful if you cannot find them?

A primary function of any operating systems is managing the location of files and folders. A **location** is any disk drive, folder, or other place in which you can store files and folders. A **file** is information stored on a computer under a single name. A **folder** is a container in which you store files. Where you store your files depends on how and where you use your data. For example, for your COMP 10150 class, you might decide to store your work on your NSCC OneDrive so that you can your files are cloud based and available at anytime, anywhere when connected to the internet.

**Cloud storage** refers to online storage of data so that you can access your data from different places and devices. **Cloud computing** refers to applications and services that are accessed over the internet, rather than to applications that are installed on your local computer. Besides being able to access your documents from any device or location, OneDrive also offers AutoSave, which saves your document every few seconds, so you don't have to. On a Windows system, AutoSave is available in Word, Excel, and PowerPoint for Office 365 subscribers. Changes to your document are saved to the cloud as you are working, and if other people are working on the same file—referred to as real-time co-authoring—AutoSave lets them see your changes in a matter of seconds.

Because many people now have multiple computing devices—desktop, laptop, tablet, smartphone—it is common to store data in the cloud so that it is always available. **Synchronization**, also called syncing—pronounced SINK-ing—is the process of updating computer files that are in two or more locations according to specific rules. So, if you create and save a Word document on your OneDrive using your laptop, you can open and edit that document on your tablet in OneDrive. When you close the document again, the file is properly updated to reflect your changes. Your OneDrive account will guide you in setting options for syncing files to your specifications. You can open and edit Office files by using Office apps available on a variety of device platforms, including iOS, Android, in a web browser, and in Windows.

Microsoft Office 365 is available for free to students at Nova Scotia Community College (NSCC).

Office 365 is a subscription service that receives continuous updates. Due to this, you may encounter some variations in what appears on your screen and what is shown in this text. When Microsoft Office 365 is fully installed on your PC or Mac; no internet access is necessary to create or edit documents. It is important to note the Microsoft Access does not run on a Mac.



An interactive H5P element has been excluded from this version of the text. You can view it online here:  
<https://pressbooks.nsc.ca/intromsoffice/?p=29#h5p-1>

## PRACTICE ACTIVITY 2: CREATING A FOLDER STRUCTURE



Prefer to watch and learn? Check out this video tutorial.









One or more interactive elements has been excluded from this version of the text. You can view them online here:  
<https://pressbooks.nsc.ca/intromsoffice/?p=36#oembed-1>

### **Complete the following Practice Activity and submit your completed project**

1. In this activity, we will use Windows to create a folder structure to store your files for class. It is important to keep your files organized so that you can find them when you need them. Saving, accessing, and uploading files is critical to your success in this course. This assignment will assist you in keeping your files organized throughout this course.
2. Using Windows, create the file structure on one of the following: NSCC One Drive, computer, or laptop. Your top folder should be COMP 1050.
3. There are a few different ways to create a new folder in Windows.
  - a. In File Explorer, click the new folder icon in the upper left hand corner
  - b. Use the shortcut key CTRL+Shift+N
  - c. Right click the white area of the File Explorer Window, and select New, Folder.
4. Your completed file structure should look something like this:

My files > COMP 1050

 Name ▾
 1. Operating Systems
 2. E-Mail Management
 3. PowerPoint
 4. Word
 5. Excel

Note: Some students like to put a number in front of the folder so that they display in chronological order. Other students like to abbreviate the unit and chapter names. The file structure is for you, so use names and logic that makes sense to you.

#### Helpful Hints:

- After you type the name of the folder, press enter.
- Use the File Explorer Navigation Pane to expand each file folder. If the arrow, or carrot is pointing down, the file is expanded. This will allow you to see the folder contents.
- To rename a folder, right click on the folder. In the shortcut menu, choose Rename. Start typing the new name, and then hit Enter on your keyboard.
- To delete a folder, right click on the folder. In the shortcut menu, choose delete.

#### Media Attributions

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## CHAPTER 1: GLOSSARY

**Definition of terms used in this chapter:**

Application	A computer program that helps you perform a task for a specific purpose
Backstage View	A centralized space for file management tasks such as opening, saving, printing, or sharing a file
Booting	Booting is the process of turning on the computer and powering up the system
Cloud-based	Subscription service that receives continuous updates
Cloud Computing	Applications and services that are accessed over the internet
Cloud Storage	Online storage of data including files and folders that allows access from different places and devices
Cortana	Microsoft's 'personal assistant in Windows 10
Data	The documents, worksheets, pictures, songs, and so on that you create and store during the day-to-day use of your computer
Data Management	The management of files and folders for the organization
Data Security	The OS is in charge of keeping data safe inside your computer and computer programs. They set up security features that keep unwanted cyber attackers at bay
Desktop	Simulation of a real desk that represents your work area
Desktop Apps	A computer program that is installed on your PC and requires a computer operating system such as Microsoft Windows to run, also known as an app
Desktop Mode	A Windows 10 view where app icons appear in an alphabetical list on the left side of the screen, and they can be made to appear on the right side as tiles
Device Controlling	Your OS will allow you to open or block access to devices like removable devices, CD/DVDs, data transfer devices, printers, USBs, and others
Disk Management	This manages all the drives installed in a computer like hard drives, optical disk drives, and flash drives. Disk management can be used to divide disks, format drives, and more
File	Information, such as a document, stored on a computer under a single name
File Name	The name of the file. It is good practice to use an underscore "_" rather than other special characters when naming a file
Folder	A spot to store and organize files on a computer
GUI	An acronym that stands for Graphical User Interface: Graphics such as an image of a file or folder that you click to perform an action
Icons	Small images that represent commands, files, applications, or other windows
Insertion point	Blinking vertical line that indicates where text will be inserted when you type or where an action will take place
Loading and Execution	Your OS will load, or start up, a program and then execute the program so that it opens and runs
Location	Any disk, drive, folder, or another place on your computer in which you can store files and create folders
Memory Management	This is the process of controlling and coordinating the computer applications and allocating space for programs

Microsoft 365	A version of Microsoft Office that includes Word, Excel, Access, and PowerPoint; to which you subscribe for an annual fee. Microsoft 365 is free to students at Nova Scotia Community College
Microsoft Account	A user account with which you can sign into any Windows 10 computer on which you have, or, create an account
OneDrive	Microsoft's free cloud storage for anyone with a Microsoft Account
Operating System	A computer program that manages the other programs and devices on a computer
Pen	A pen-shaped stylus that you can use on touch screen computers
Pointer	Any symbol that displays on your screen in response to moving your mouse and with which you can select objects and commands
Pointing Device	A mouse or touchpad that is used to control the pointer
Process Management	Your OS has to allocate resources to different processes on the machine, enable the processes to share information, protect them, and synchronize them
Program	A set of instructions that a computer uses to complete a task
Printing Controlling	Simply put, your OS takes control of the printers that are connected to the computer and the materials that need to be printed
Resources	The physical components of your computer such as the CPU, memory, and other attached devices like a USB or printer
Start Menu	A menu in Windows 10 that displays as a result of clicking the Start or Windows icon and displays installed programs and tiles
Synchronization	Also called synching, is the process of updating computer files that are in two or more locations according to specific rules
Touch Screen Interfaces	Often used on mobile devices, tablets, and some laptops, a display device that allows the user to interact with a computer by touching areas on the screen
USB Flash Drive	Also called a removable storage device, used to save and transfer information from one computer to another
User Account	A single user on a computer
User Interface	A user interface or UI refers to the part of the OS that allows a user to enter and receive information. This can be done with typed commands, code, and others
Windows 10	An operating system developed by Microsoft Corporation that works with mobile computing devices and also with traditional desktop and laptop PCs
Windows 10 Display	The configurable pages in Windows 10 which is an Operating System developed by Microsoft that works on mobile devices and traditional laptop and desktop PC's





## CHAPTER 2: E-MAIL MANAGEMENT

### Objectives



- Managing your Inbox
- Controlling your “Out & In” flow of messages
- Creating a signature in Outlook

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# EMAIL INBOX POWER HOUR



If you have a lot of your emails in your inbox, looming over your head, then this chapter is for you. Whenever you have a buildup, you can open this chapter and work through it for one solid hour.

Normally, the exercises for the chapters would be at the end, but this whole chapter is an exercise, so we will break it down into steps.

## The Goal: Inbox Zero

The goal of this power hour is to get your inbox so that there is nothing in it. Why? Because we need to stop using our inboxes as a task list, a reader, and a reference file. It needs to do its job as a landing place for things you haven't dealt with yet. This is often called "Inbox Zero".<sup>1</sup>

Inbox Zero is a rigorous approach to email management aimed at getting the inbox to nothing in it and keeping it empty. I don't agree with responding to all emails every day, but I do recommend you aim to get things out of your inbox and put them into different places and deal with them specifically. So that's what the email power hour will do.

During this process, you will not only be cleaning out your inbox but also creating rules that will help keep your inbox clean.

## Skills Before You Start

Before we get started, you need to know some features of your email program.

In Outlook, you will need to know how to:

- Organize your email by using folders
- Use Inbox rules in outlook.com
- Set up rules for Outlook desktop app

## Prep: Schedule a Power Hour

Find one hour of uninterrupted time. During this hour, do not respond to any new emails that come in. Lock your door and set yourself to do not disturb. You might get through all your emails in this hour. If

1. Tank, E. (2017, April 12). Improve Your Productivity With Inbox Zero. Entrepreneur. <https://www.entrepreneur.com/article/290175>

not, then you will set up as many power hours as it takes to get through. I assert you might be surprised how many you get through when you change your mentality of what your goal is.

### **Get Your Email Log**

Open your email log document, and note the date and how many emails you currently have in your inbox. Every time you work on your inbox, open up this document, note the date and the number of emails, and keep track of what you did.

### **Create Four Folders or Labels**

In Outlook, I put the folders under the inbox. In Gmail, you create labels. The point is, you are going to create a folder or label called “TODO”, one for “Read Later”, and one for “FYI”.

- **TODO** – This is for any email you must take an action on at some point.
- **Read Later** – This is for emails that contain a lot of information that you have to digest, so you need more time with them.
- **FYI** – This is for emails you were sent only for information.
- **Reference** – This is for emails that you have to keep to check later.

### **Set a timer**

You will need a few timers, actually. You can use your phone, but I prefer to use an online timer. You can find one here at [Time and Date Timer](#). Set one timer for 1 hour. Set a 10-minute timer and reset it until you hit the end of your hour, or you can set up a timer to go off every ten minutes.

### **The steps**

I’m going to write out the steps here so you can reference them quickly, but read the sections below on them to understand the process before you start.

- 1-10m: Quick Sort from top to bottom
- 11m-20m: Emails from NOT People
- 21-30m: Emails to NOT you
- 31-40m: Unread email
- 41-50m: To me from a real person
- 51-60m: Closeout

### **1-10m: Quick Sort**

For Outlook, you will move these emails to folders. For Gmail, you will apply labels (by dragging and dropping) and remove them from the inbox using the archive button.

For ten minutes, focus on the first email in your inbox and decide if it needs further action (move it to TODO), if you need to read it more in-depth to figure what you need to do (Read Later), and if it is just an email that was sent to you for information (FYI). If there is no work needed, but you still need the email, move it to Reference. Under no circumstances are you to respond to any email at this stage. If you feel like you should respond, then it should go in TODO.

I like to have my reading pane open so I can quickly glance at the contents of an email.

The important thing is that you go fast and don’t think about it too much.

Stop working when the alarm goes off, even if you’re not done.

### **11m-20m: Emails from Not People**

If you are getting an email from a person, it’s probably something you need to respond to. If you’re

getting an email from a group or organization, most likely it's an FYI email. You might have to look at it, but you don't necessarily need to do something. Your goal is to find emails from Not People, and see if you can move them to your FYI folder. Stuff like notices from your bank, notices from Amazon, or from listserves. Usually, only the new emails from these groups are relevant, and you should have been able to deal with most of those in the first 10 minutes, so all the rest should be FYI.

In Outlook, create rules to move these emails as you find them. In Gmail, use the "Filter messages like these" to automatically label these as FYI in the future, and remove them from the inbox. In Outlook, you can also sort by ICON, which will put all your meeting requests and responses on either the top or the bottom. Missed calls and other notifications. Move all of these to the FYI folder.

Don't be worried about not seeing these. Later in the book, we'll help you create a method for dealing with these emails so you never miss one.

Stop working when the alarm goes off, even if you're not done.

### **21-30m: Emails to NOT you**

For the next 10 minutes, you're going to avoid emails sent directly to you. You will focus on emails sent to groups, lists, etc. In Outlook, you can sort by the To column, and just avoid the section that only has you in the TO field. See if you can move these to FYI, and create rules and filters to automatically move them in the future.

Stop working when the alarm goes off, even if you're not done.

### **31-40m: Unread Email**

Now, sort your inbox only by unread email left. If you consistently don't read an email from someone, maybe that's an email that needs to go to FYI. Make a rule. See how many of your unread emails are actually ones that you could make rules about to avoid them in the future.

Some people use email too much, and they also somehow never manage to actually do anything with it. Of the people left in your inbox, who never seems to say anything you want to read or need to respond to? Make a rule for them to be moved to the FYI folder.

Some notifications you signed up for, but you just never have time to read them. Go ahead and make the decision to move them to FYI and have a rule that puts them there first.

### **41-50m: To Me from A Real Person**

Focus on going through emails from real people directly to you. Decide if they are TODO, Read Later, or FYI.

### **51-60m: Closeout**

Look at how many emails you have left, and jot that down in your Email Log. Make note of anything you learned during your supercharged email cleaning. If you're not done with your inbox, use this time to also schedule another Power Hour to go through the rest of your email.

#### **Credit**

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# CONTROL THE FLOW OUT



The first step toward taming your email is by starting with the person in the mirror. Master your own email habits before you tackle everyone else's.

## Send Fewer Emails

If you send out fewer emails, you will receive fewer. Always ask yourself if an email needs to be sent out or if it can wait until later.

## Delay Sending Emails

Most of the email services available have a delayed delivery option. Ask yourself if you can delay sending the email until 9am the next morning. If you can, then do.

- Outlook Desktop App: Delay or schedule sending email messages

## Don't Hit Reply-All

How many of us have been a part of an email chain where everyone was responding to the whole group and twenty people were being spammed when they didn't need to? The fewer people on an email, the fewer responses you'll get back, so stop and ask yourself if you really need to hit reply-all. You need to hit reply-all if more than one person needs to know the email was responded to, if your response will influence others, and if the email impacts 70% of the people on the chain<sup>1</sup>.

## Use Blind Carbon Copy More

BCC is a great way to keep people in the loop even when they are not the primary person an email is intended for. If you BCC on emails, then other people will not be able to hit "Reply-ALL" and spam the whole group. The BCC'd recipient will know the email is sent without being subjected to all the chatter that happens afterward. This is especially important when you're sending to large groups.

1. Hart, M. (2019, July 18). When to Use Reply, Reply All, Cc, and Bcc. Hubspot. <https://blog.hubspot.com/sales/reply-reply-all-bcc-flowchart>

## Don't Send Many Emails When One Will Do

Use your drafts or a notes app to keep track of things that you want to send people that are not urgent. Once you hit three things, then send the email with three things instead of sending three separate emails.

## Give Yourself Time to Back out

I have a rule that every email I send gets held in my outbox for one minute, which is plenty of time for me to realize that I shouldn't send something. I can go delete it or move it to a draft before it gets sent. In Outlook, you can do this by creating a rule to defer delivery by one minute. If you've already started scheduling emails for the following morning, then you'll also have plenty of time to back out of an email you shouldn't send.

## Have a Meeting, Phone Call, or Chat Instead

If it takes more than three emails, or if the email is going to be longer than a paragraph, just contact the person a different way. I have a personal rule that if I end up revising an email more than three times, it means I need to call them up and talk to them instead because the issue is too complex for email.

Always avoid email if you are breaking bad news to someone, if you are upset, or if you are resolving a conflict. Apologizing through email after the conflict is resolved is fine.

Bettina Buechel created a scale for deciding if things should be handled in email or in person by evaluating the scope of the media and the richness of the media<sup>2</sup>. In this scale, face-to-face communication is at the opposite spectrum as a blanket email. So, when the stakes are high, and you have no room for misunderstanding, you will need all the communication richness you can manage, so you should talk face-to-face. If the message you have is simple and you need to communicate it quickly, use email.

If you need a quick consensus, an email will do. However, discussion getting to a consensus should happen a different way.

## Make Your Important Emails Different

Help other people sort through their emails by making it clear which emails from you are vital and which ones are just FYIs. You can either use email flags, or you can tag your subject line. It doesn't matter what method you use as long as you are consistent. Do not use your "important" tag on all your emails. Try to only use them on the ones you really need an answer to. When you are just sending someone information they don't need to act on, make that clear by saying "FYI" first thing in the subject line.

Schedule your important emails so they will be read. Schedule your unimportant emails so it doesn't matter. For an email you must get a response to, you can pick good times that most people are actively engaged. I looked at marketing research to see what times marketers think are peak attention times.

The best day of the week to get people's attention is Tuesday. Mondays are bad because it's the first

2. Turmel, W. (2006, March 2). Phone or Email? Meeting or Wiki? When to Use Which. CBS News.  
<https://www.cbsnews.com/news/phone-or-email-meeting-or-wiki-when-to-use-which/>

of the week. Fridays are bad because people are looking forward to the weekend. After Tuesday is Thursday, and then Wednesday.

The best time of day to get people's attention is 10-11am. It avoids their maybe slow morning start and the lunch hour. After that, it's 2pm. The third best time is 6am, because you can schedule an email to be the first thing in someone's inbox when they open it.

So, if you really need to get someone's attention, send the email at 10am on Tuesday morning.

If, however, you have FYI emails you want to send people, choose Friday or Monday, at non-peak times.

## Communicate Clearly

An email problem in an organization is a sign of a greater communication problem<sup>3</sup>. You might not be able to fix other people's communication problems, but you can fix yours. Write your emails so they can be easily read, easily understood, and they don't require too much from the reader<sup>4</sup>.

Keren Eckberg identified four types of email:

1. Self-fulfilling – Tell the receiver something expecting no reply. Use "FYI:"
2. Inquiry – You need something from the receiver. The reply is the desired outcome. "Response Needed:"
3. Open-Ended Dialog – You want to keep communication lines open for future purposes.
4. Action – The goal is an action on the part of the receiver, not a reply. "Action Needed:"<sup>5</sup>

Be concise and to the point. Let your receivers know right away what you need from them and what type of email you are sending so they don't have to figure it out on their own. If no action is expected, state that no response is necessary.

The US military goes further with this concept of using the subject line<sup>6</sup>.

- "ACTION-" Compulsory for the recipient to take some action.
- "SIGN-" Requires a signature from the recipient.
- "INFO-" This is an informational email only. No response or action is required.
- "DECISION-" This email requires a decision from the recipient.
- "REQUEST-" Seeks permission or approval by the recipient
- "COORD-" Coordination by or with the recipient is needed.

You don't have to use this exact system, but it's good to keep in mind. They want to get the who, what, when, where, and why as fast as possible. They follow the concept of BLUF (Bottom Line UpFront), where you answer all the details right there.

## Forward Emails Carefully

There are two kinds of forwarding: manual and automatic. If you consistently get emails that you are

3. Gallo, A. (2021, February 12). Stop Email Overload. Harvard Business Review. <https://hbr.org/2012/02/stop-email-overload-1>

4. Eckberg, K. (2011, November). Effective email communication. Northeast Wisconsin Technical College. <https://www.slideshare.net/KarenEckberg/effective-email-communication>

5. Ibid.

6. Allen, P. (2016, December 1). Write Email With Maximum Efficiency Using This Military System. Lifehacker. <https://lifehacker.com/write-email-with-maximum-efficiency-using-this-military-1789571032>



manually forwarding to other people, you can set up a rule to do that automatically. Even better is get them to be the receiver of the emails. If you have to get a notification, then try to get your name on the BCC.

If you manually forward an email to someone, always add context before you send it. There's a reason I put this below the communication section. If you can't add context to a forwarded email about what you expect from the person you're sending, then you shouldn't forward it. It just confuses them and demands too much from their attention.

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## CONTROL THE FLOW IN



Now that you have 1) gotten your email down to zero and 2) slowed the flow of emails out, next we need to start dealing with controlling the flow of emails in. If you did the email power hour, you actually have a lot of data that you can use to finish this section. Go through your FYI folder and see what things can be gotten rid of or moved.

### Unsubscribe

Unsubscribe from anything you can manage. Before you make a rule or a workflow in how to handle something, decide if you really need it or not. An easy way to see if you need something is by looking at how many of the emails from that subscription are unread.

### Turn Off Notifications

People often use emails as a notification system. The purpose of a notification is to get your attention. If your inbox is full, then any notification there will not get your attention so it doesn't help.

### Move It to Something else

Do you have a blog you follow that you get emails about? Instead of getting an email for it, sign up for an RSS service or just set a time on your calendar to go read the blog. If you are getting notifications from a service, just schedule a time to check that service instead of getting notifications. This goes for Twitter, Facebook, Slack, etc.

### Mark It as Junk

If you can't unsubscribe from something, consider marking it as junk. It will go to your junk mail folder so if you really need it in the next 30 days, it will be there, but it will also not be in your inbox and it will automatically disappear. I am particularly fond of doing this for listserve emails, because I can go back and reference them if I need to, but they're irrelevant after 30 days and they disappear.

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## MAKE A SYSTEM



So, now that we've tamed your inbox, controlled the flow of emails in and out, the next thing is to actually come up with a system to deal with your emails once you've sorted them, and to keep your inbox at zero.

### Morning 10-Minute Email Triage

Every morning (or whenever you decide to work on email), set a 10-minute timer and open your inbox. You can find one here at [Time and Date Timer](#). You will spend these 10 minutes only sorting email. Not responding to it or reading it. You will sort your email into the folders you created during your power hour. So, TODO, Read Later, and FYI, or you're going to delete them.

Some people use the 4-D's: Delete, delegate, do or defer<sup>1</sup>. The only reason why I don't like this system is that the "do" and "defer" cuts into your time like nothing else, and I think it's better to spend a dedicated 10 minutes sorting email so you can focus on the doing and deferring later.

#### Dealing with FYI

I deal with my FYI folder immediately after my 10-minute email triage, but only if I have extra time in my 10 minutes. Once you get your inbox to zero, this shouldn't be hard. Read through your FYI emails quickly, and delete most of them. Glance, read, delete. If you realize that you actually have a TODO, then move to the appropriate folder. The idea is that you go fast and not waste your time on them. If you have a backlog from your email power hour, then go through as many as you can before the 10 minutes for your Email triage is up, and STOP. Work on the rest tomorrow.

#### Outlook Quick Steps

For me, one of my strongest allies in my inbox triage time is my Outlook Quick Steps.

- Outlook Desktop App: Automate common or repetitive tasks with Quick Steps

I have five set up, because the little banner at the top only shows five.

- Calendar- Create an appointment with the text of the email message, move the email to archive, mark complete. Great for ANY email that is just giving you a date you need to do something or be somewhere.
- Done- Marks message as complete, moves to Archive, mark it a read. Great for emails that you don't have to do anything to, but you want to make sure you know you looked at it. Also

1. Product Plan. (n.d.). *The 4 Ds of Time Management*. <https://www.productplan.com/glossary/4-ds-of-time-management/>

good for when you've completed TODOs, because it moves them out of the folder and marks them complete.

- TODO- Flags message to follow up tomorrow, moves it to my TODO folder, marks as read.
- Read Later- Moves it to my READ LATER folder, flags message to follow up next week.
- Reference- Moves the email to my reference folder. Marks as read. Marks it as complete.

I'm a big fan of using Outlook's task list, but I'm also just that kind of person. So for me, the quick steps automate some of that. I've also set up my Outlook tasks to only show me things that are due today or overdue, so I don't get overwhelmed. However, personal task management could be its own book. Be on the lookout for a sequel.

## Dealing with TODOs

For this first bit of getting through the TODOs you built up in your email power hour, schedule an hour a day to do nothing but work through these. Once your timer goes off, stop and work on your other work. For the hour, decide how you will tackle your email, either First In, First Out or Last In, First Out:

### **First In, First Out**

The idea that you go from oldest to newest, and tackle emails as they were given to you. The benefit of this is that the people who have waited for the longest will get dealt with first. However, if you rememehr our introduction chapter, most people give up on getting a response from an email after 48 hours because the chances they'll get responded to are low. There's also this idea that they've waited this long- what's the issue with them waiting a bit longer? However, some jobs require you to tackle the first ones in first. If that's the case, then you don't have a choice, but if you do have a choice, I suggest you do the next one.

### **Last In, First Out**

The idea being that you take the most recent email and work on that one first, then the next one. I highly recommend this, especially to start off with, because it lets people who have active concerns be responded to first, so that your turnaround time is immediately faster for new requests. This is how you start changing your reputation and being a prompt responder, even with tasks filling your todo list.

## Dealing with Read Later

Read Later emails are often ones that need concerted attention to get through, but they might not require you to actually do anything. So, schedule one hour a week to deal with these. Set a timer, and stop when the timer goes off. Get through as many as you can. If you realize that in reading, you've developed TODOs, that's fine. Move emails as necessary.

## Set up a schedule

I set up a schedule to deal with my email. 10 minutes every morning for triage and FYI emails. One hour every week for Read Later emails (for me it's on Monday mornings). And I schedule a work hour to get through my TODO's. These are actual appointments on my calendar. Now, let's add that up.

- 10 minutes every morning for 5 days is 50 minutes
- + 1 hour of Read later

- + 5 hours of todo.

Total thats 6 hours and 50 minutes spent on email every week, instead of the 20 that most people spend.  
What to do with all that extra time?

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# CONTROL YOUR ATTENTION



Now that you have your email sorted out, and you have a schedule to handle the incoming email, it's now time to control how much attention you pay emails.

## Control when you Check Email

If you are involved in work that requires deep thought and concentration (and your boss expects this), you can get away with only checking email once a day. Break the expectation of immediate response, and make it clear that you will check it and when. You can put this in your signature line if you like. Always let your supervisor know that you are doing this.

However, if you are in a situation that you have to deal with more urgent things through email, or most of your job is email, then we can take advantage of that statistic that half of all emails get responded to within an hour. Check your email on the top of the hour for urgent emails.

## Close your Email

No amount of organization is going to fix an email problem if you still have to think about it all the time. Remember, the whole point of this is to focus less on email so you can do other things. If you're sitting there waiting for emails to come in, you're wasting your time. Do your scheduled email tasks, and then close the whole program down.

## Ask for Urgent and Important Emails to be treated differently

If you are not actively looking at your inbox all day, then when something comes through that is truly urgent, you might be scared you won't see it. Alleviate that fear by asking your supervisor and your employees to treat urgent emails differently. You can use your email signature line to let people know what you would like.

If you have a person that is super important, you can create a rule to handle those differently. In Outlook, you can ask people to use the "Mark as Important" feature. Or, you can ask that they put the word "URGENT" in the title, and you can create a rule that handles those differently.

You can set up rules to have urgent emails go to your phone, make a sound on the desktop, or even pop up in a window.

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# REVIEW

In this chapter we have gone through quite a journey. Hopefully, along the way you've learned that your whole life probably shouldn't be about email.

Here is a quick reference you can print out:

- Inbox Power hour
  - 1-10m: Quick Sort from top to bottom
  - 11M-20M: Emails from NOT People
  - 21-30m: Emails to NOT you
  - 31-40m: Unread email
  - 41-50m: To me from a real person
  - 51-60m: Closeout
- Control the Flow Out
  - Send Fewer emails
  - Delay sending emails
  - Don't Hit reply all unless you have to
  - Use Blind Carbon Copy (BCC) more
  - Use drafts and notes to build up information for people, and send one email instead of many.
  - Give yourself time to back out by delaying email.
  - Have a meeting, phone call, or chat instead.
  - Make your important emails different
  - Communicate what you need from someone clearly
  - Add context when forwarding emails
- Control the Flow of Email in
  - Unsubscribe from things
  - Turn off notifications
  - Move it to something else
  - Mark it as junk
- Make a system
  - Morning 10-minute email triage and delete FYIs
  - Schedule 1 hour a day to deal with TODO emails. Last in first out if you can.
  - Schedule 1 hour to read the Read Later emails.
  - Set up a consistent schedule that works for you.
- Control Your Attention
  - Control when you check. Once an hour? Twice a day? Once a day?
  - Close your email for most of the day
  - Ask for urgent emails to be sent differently

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## CHAPTER 3: PRESENTATION SOFTWARE

### Objectives



PowerPoint Chapter 5 will be focusing on how to create presentations. We will be covering the following concepts:

1: Define functions of presentation graphics

programs as used in business.

2: Design, create, and execute an artistic presentation to include graphics and animation.

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# LEARN IT



**Presentation software** is designed to allow the user to present information in an engaging way with text, pictures, sound, and video. It is a way to communicate ideas in a powerful, organized manner. It utilizes sequences of **slides** that accompany a spoken **presentation**. The presentation may also be recorded and posted online. The slides are consolidated in virtual files **called slide decks**. Communication skills are necessary for many careers. Presentation software can help to deliver a message online or in-person to a large audience or small group. The goal is to create a presentation that will leave a lasting impression on the audience, and not distract them from the message you are delivering. The ultimate goal is to create dynamic, interesting presentations

that engage your audience.

## Common presentation software programs:

Presentation Software	Type	Key Features
Microsoft PowerPoint	App	Available across many platforms including mobile devices for ease of use Arguably the most commonly used presentation software in business Powerful and easy to use Integrates well with Microsoft Office
Apple Keynote	App	Included with most Apple devices Real time collaboration Use Apple Pencil on your iPad to create diagrams or illustrations that bring your slides to life
Google Slides	App	Integrates with other Google Apps Unique audience Q&A feature Advanced web publishing features

Going forward, we will focus primarily on Microsoft PowerPoint.

Since **Microsoft PowerPoint** is widely used in business, and we are using Microsoft Windows, we

will focus on this presentation software. There are many similarities across presentation software, so the skills we are learning can be translated to other systems. Some of the tasks in PowerPoint may seem familiar because they were used in other applications. The following 'Practice It' assignments are designed to be completed using Microsoft PowerPoint in Office 365 on a PC with Windows 10 or higher. You may need to download the Professional version of Office 365 (which is free to students) to access all features.

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# POWERPOINT PRACTICE 1



Prefer to watch and learn? Check out this video tutorial:

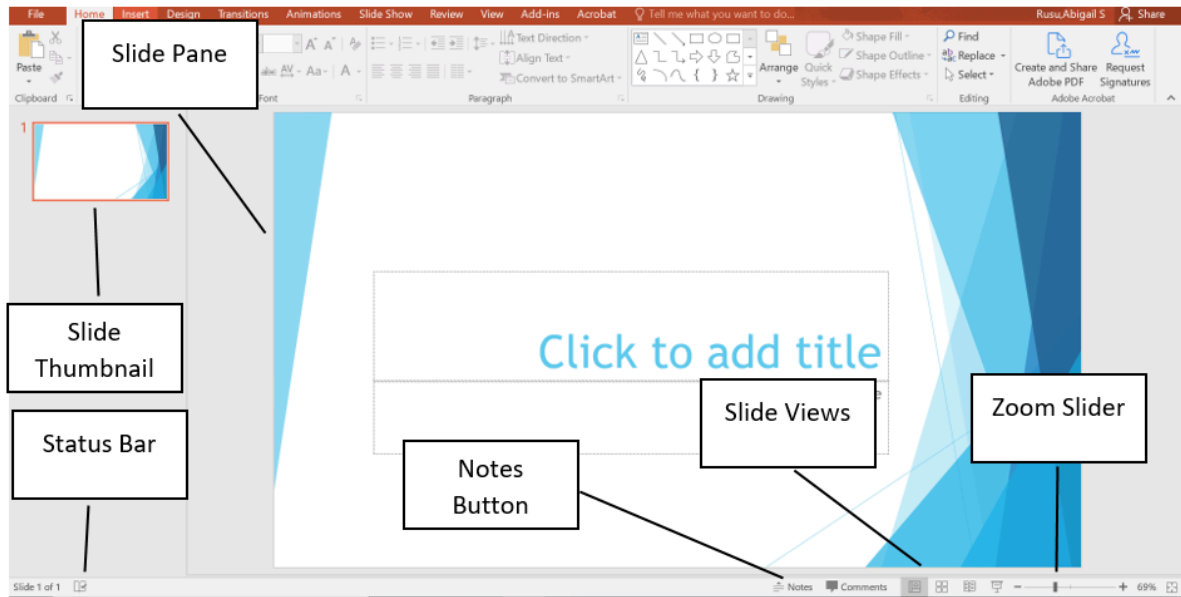


One or more interactive elements has been excluded from this version of the text. You can view them online here:  
<https://pressbooks.nsc.ca/intromsoffice/?p=200#oembed-1>

## Complete the following Practice Activity.

We will use PowerPoint to create a presentation that welcomes new students to Paradise Valley Community College. As a Peer Leader, you have been asked to present at New Student Orientation, where new students are introduced to college life at PVCC. We will build upon this presentation over the next 4 practice assignments. Key skills in this practice include creating a new presentation, entering text, presentation views, presentation themes, speaker notes, adding and formatting pictures, printing a presentation, and Header and Footer options.

1. Start PowerPoint, notice how it opens in Backstage View. Under **Themes**, select the Facet theme. If the Facet theme is not visible, use the search to locate it. Select the second **color variant**, the blue one, and then select Create. If PowerPoint does not open in Backstage View, select the file button to show Backstage View, and then select blank presentation. Then, on the Design tab, select the theme as indicated above.
2. Select File, Save As, Browse, and then navigate to your NSCC OneDrive or other location where you save your files. Name the **presentation** as Yourlastname\_Yourfirstname\_PowerPoint\_Practice\_1.
3. Take a moment to view the PowerPoint window:



4. Notice that the **layout** of slide 1 is Title and Content. This is a common layout for the **Title Slide**. All text, graphics, videos, or anything that is on a slide must be in a **placeholder**. In the Click to add title placeholder, type "Welcome Pumas!" In the subtitle placeholder type "Fall New Student Orientation".
5. On the Design tab, in the Themes group, ensure under Variants, Blue colors are selected.
6. Although we only have our title slide added, most presentations have several slides. When creating your presentation, keep in mind the attention span of your audience, and the allotted amount of time. For this presentation, we have been allotted 10 minutes, and will create 5 slides.
7. On the View tab, in the Presentation Views, notice that **Normal view** is selected. This is the most common view when creating your presentation. Other views are:
  - **Outline View**
  - **Slide Sorter**
  - **Notes Pages**
  - **Reading View**
  - **Slide Show**
8. On the Home tab, in the Slides group, select the arrow next to New Slide and selected Title and Content. In the Click to add title placeholder type Student Life.
9. With slide 2 still active, on the Home Tab, in the Slides Group, select the arrow next to Layout and select Two Content. Notice how the layout of slide 2 changed.
10. In the first content placeholder on the left, type the following, pressing Enter after each line:
  - Get involved with Student Life and Leadership!
  - Connect with fellow students
  - Discover empowerment
  - Make a difference
11. Format the text as a bulleted list, with the default bullet. Change the font size of the text to 28.
12. In the second placeholder, use the placeholder shortcut to insert an online picture. In the



Insert Pictures dialog box, use the Bing image search to search for a picture of students. Choose any picture of college students, and insert it into the placeholder.

13. With slide 2 displayed, in the **Status Bar** at the bottom of the screen, click Notes. Notice that the **Notes Pane** displays below the Slide Pane. In the Notes pane type: We sponsor numerous campus events and opportunities for you to participate in our dynamic learning environment. Through Student Life, students engage in educational relationships that inspire positive social change, contributing to a richer and more fulfilling college experience. Not only that, students build leadership and professional skills that carry on through life.
14. On the Home tab, in the Slides Group, select New Slide and choose the Title and Content layout. For the title type Athletics. In the Content Placeholder, type the following bulleted list:
  - Soccer
  - Golf
  - Tennis
  - Cross Country
  - Track and Field
  - Baseball
  - Softball
15. Resize the text to 28 pt and use the default bullet.
16. With slide 3 still active, on the Insert tab in the Illustration group, select the arrow next to Shapes, under Stars and Banners add the Explosion 1 shape to the right of the bulleted list. Click and drag the shape onto the slide.
17. Inside the shape, double click, then type Find us on Social Media @Puma Athletics
18. Use the Sizing handle to turn the Explosion shape slightly to the left, and move it so that it is in line with the text. Use the guides to align the image.
19. With the Explosion graphic still selected, on the Drawing Tools Format tab, in the **Shape Styles** group, select the Colored Fill-Blue, Accent 2 shape style.
20. On the Home tab, in the Slides Group, select New Slide and choose Picture with Caption Layout. In the picture placeholder, click to add a picture. Browse to your data files, and insert the image PowerPoint\_Practice\_1. On the Picture Tools Format tab, in the Size group select the arrow under **Crop** and select **Fit**.
21. Select the placeholder below the image and enter the following title: It is great to be a Puma! In the placeholder below that, type: Welcome to PVCC! Change the font size of the second text placeholder to 36.
22. With slide 4 still active, ensure the Notes Pane displays. In the notes section, add the following **speaker notes**: Explain the Puma Commitment and the support available to students.
23. On the Home tab, in the Slides Group, select New Slide and choose Blank Layout. Ensure slide 5 is active
24. On the Insert tab, in the Text Group, select the arrow under **WordArt**, and select Word Art in the second row, second column Gradient Fill Green Accent Color 5; Reflection (if you cannot find this exact one, choose one close to it in color). Type the text: Any Questions?
25. Change the font size of the WordArt to 72.
26. Display slide 1. On the Insert tab, in the Text Group, select Header & Footer to display the Header and Footer Dialog Box. Notice there are two tabs: Slide and Notes and Handouts. On the Notes and Handouts tab, check the box next to Data and Time. Ensure the check box next

- to Page Number is also selected. Click Apply to All.
27. Select the File tab to display backstage view. Select Print to view the **Print Options**. Although PowerPoint slides are meant for presentations, there is the option to print slides for the presenter and participants. Click Full Page Slides to then choose **Notes Pages**. Scroll through the slides and notice that slides 2 and 4 are displaying the Notes.
  28. Select Notes Pages, and choose 6 slides Horizontal. Notice how the data and page number displays on the slide in **Print Preview**.
  29. Save your presentation, and take note of where it is located. There should be a total of 5 slides in your slide deck. Compare your presentation to the image below, and make any modifications if needed. Close out of PowerPoint and submit your entire presentation per your instructor's instructions.



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## POWERPOINT PRACTICE 2

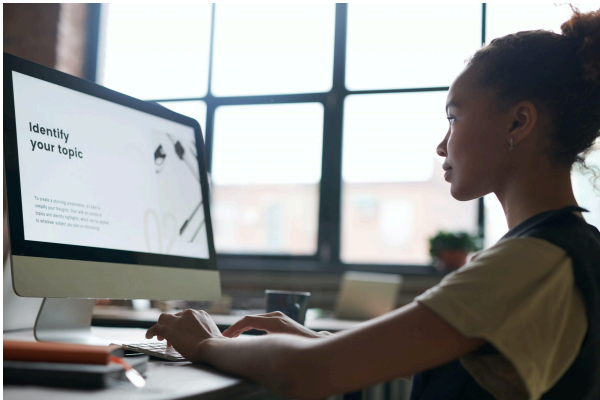


Prefer to watch and learn? Check out this video tutorial.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/intromsoffice/?p=204#oembed-1>

Complete the following Practice Activity.



We will continue to work with the PowerPoint presentation we started in PowerPoint Practice 1. You have been asked by the Occupational Dean to add additional content to the presentation regarding Peer Leadership and Fields of Interest at PVCC. Key skills in this practice include Reuse slides, deleting and moving slides, contiguous and non-contiguous slides, transitions, and animations.

1. Start PowerPoint, notice how it opens in Backstage View. Under Open, browse to locate your PowerPoint\_Practice\_1, and select open.
2. Select File, Save As, Browse, and then navigate to your NSCC OneDrive or other location where you save your files. Name the presentation as Yourlastname\_Yourfirstname\_PowerPoint\_Practice\_2.
3. There should be 5 slides in your slide deck. Ensure your presentation is in normal view.
4. With slide 3 selected, on the Home tab in the slides group, select New Slide and then **Reuse Slides**. In the Reuse slides pane, Browse File and navigate to your data files to locate the file PowerPoint\_Practice\_2 and select Open. In the Reuse slides pane, double click the first and second slide only to add to your presentation. Do not add the third slide, and do not check the

box to **keep source formatting**. Close the Reuse Slides pane.

5. On the View tab, in the Presentation View group, change the view from Normal to Slide Sorter. Change the zoom to about 50% so that all slides are shown on one page.
6. Select slide 5, Peer Leaders, and move it to the slide 3 spot by clicking and holding down and dragging it to the slide 3 spot. Peer Leaders should be the new slide 3.
7. Select slide 7, Any Questions, right click on the slide, and select delete slide. This will remove the slide from the slide deck.
8. Select the **noncontiguous** slides, 1 and 6. To select two slides that are not next to each other, select the first slide, and ensure it is outlined in red to indicate it is selected. Then hold down the CTRL key and select slide 6. Then let go of the CTRL key. Both slide 1 and 6 should be outlined in red.
9. With slide 1 and 6 selected, on the **transitions** tab, in the transitions to this slide group, select Fade under Subtle. Notice how slide 1 and 6 have a star next to them to indicate a transition has been applied.
10. Select slide 4. In the lower right hand corner, select slide show view. In slide show, or presentation view, use the arrow on your keyboard, or mouse clicks to transition from slide to slide. Notice how the slides with the star, or transition, fade since a transition was applied. Press ESC on your keyboard to exit out of slide show view.
11. On the view tab, in the Presentation Views group, select Normal.
12. In the thumbnail pane, select slide 2. It should be outlined in red when selected. Hold the shift key on your keyboard and select slide 5. Let go of the shift key, and notice that slides 2, 3, 4, and 5 are all selected and outlined in red. Since these slides are **contiguous**, we use the shift key to select them.
13. With slide 2, 3, 4, and 5 selected, on the transitions tab, select reveal transition under subtle. Notice how all slides in the thumbnail pane have a star next to them since they all have a transition applied.
14. Select slide 1 so that it is the only active slide, and launch the slide show. Use the arrows on your keyboard to scroll through each slide in the slide deck, paying close attention to the transitions you just applied.
15. Select slide 3, Peer Leaders. Select the text box with the bulleted list and ensure all of the text inside is selected. On the home tab, in the font group, use the Increase Font Size button to increase the size of the Font to 28. If necessary, un bold the text.
16. With slide 3 still active, on the Insert tab, in the Images group, select **Online Pictures**. In the insert pictures dialog box, under the Bing Image Search type student leaders and then press enter. Choose any image you like that represents peer leadership at a college. Insert the image of your choice under the last bullet on slide 3. If necessary, resize the picture so that it fits on the slide without overlapping with the text.
17. Select the image you just added. On the **Animations** tab, in the animation group, select the Fade entrance effect. Once the animation is applied, notice the number 1 appears next to the image to indicate this is the first animation that will play.
18. On the Animations tab, in the advanced animation group, turn on the **Animation Pane** by clicking it one time. The Animation Pane will open on the right side of the screen. Click the down arrow next to the first animation, Picture 1 and select **Effect Options**. In the Fade dialog box, select the Effect tab, and under Sounds choose Applause. Click the speaker icon to hear the applause and ensure your volume is turned up, but not too loud. Select OK to hear the applause sounds you just applied. Close the Animation Pane.

19. Select slide 5, Fields of Interest. Select the text box with the bulleted list, and change the font size of the text to 24. Move the text up slightly if necessary.
20. On the Insert tab, Images group, select Pictures. Browse to where your data files are stored and locate the image PowerPoint\_Practice\_2\_step20 and insert the image. Move the image so that it is in the white space to the right of Education, Stem and Visual and Performing Arts.
21. With the image on slide 5 still selected, on the Picture Tools Format tab, in the Size group, select the arrow under **Crop**. Select **Crop to Shape**, and then select the Oval shape. Notice how the shape crops to an oval.
22. With the shape still selected, ensure the height is about 1.8” and the width is about 2.6”. If necessary, adjust the size and location of the image so that it is not overlapping any of the text and fits in the white space to the right of the text.
23. Save your presentation, and take note of where it is located. There should be a total of 6 slides in your slide deck. Compare your presentation to the image below, and make any modifications if needed. Close out of PowerPoint and submit your entire presentation per your instructor’s instructions.



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## POWERPOINT PRACTICE 3



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<https://pressbooks.nsc.ca/intromsoffice/?p=208#oembed-1>

**Complete the following Practice Activity and submit your completed project.**



We will continue to work with the PowerPoint presentation from PowerPoint Practice 2. You have been asked by the Student Affairs Dean to add additional content to the presentation including resources to help students succeed. Key skills in this practice include using smart guides and the ruler, inserting text boxes and shapes, using the eyedropper, SmartArt, WordArt, and Shape Styles.

1. Start PowerPoint, notice how it opens in Backstage View. Under Open, browse to locate your PowerPoint\_Practice\_2, and select open.
2. Select File, Save As, Browse, and then navigate to your PowerPoint folder on your flash drive or other location where you save your files. Name the presentation as Yourlastname\_Yourfirstname\_PowerPoint\_Practice\_3.
3. There should be 6 slides in your slide deck. Ensure your presentation is in normal view and select slide 5.
4. With slide 5 active, on the home tab, in the slides group, select the arrow under new slide and add a new slide with the Title and Content layout. This will be your new slide 6.
5. In the Click the add title placeholder type Students Succeed Here!

6. In the text box below the title, add a bulleted list with the following:
  - Learning Success Center
  - Academic Success Coaching
  - English Language Learner Center
  - Device Checkout
  - CARE Office
7. Select all of the text in the bulleted list, and ensure the font size is 28.
8. On the view tab, in the Show group, check the box next to Ruler to turn show the vertical and horizontal ruler.
9. On the Insert tab, in the images group, select Online Pictures. Use the Bing Image Search to search for a 'success' image. Insert an image of your choice into slide 6.
10. On the Picture Tools Format tab, click the dialog box launcher in the Size grouping to launch the Format Picture dialog box. Set the height of the picture to 2", and the width of the picture to 3". If necessary, uncheck the **Lock aspect ratio** check box. Close the format picture dialog box.
11. Select the image, and move it slowly to the left and right, up and down. Notice how markers, or **Smart Guides** appear on the slide and on the ruler. Use the smart guides to align the picture at approximately the .5" mark on the vertical ruler and the 3" mark on the lower half of the horizontal ruler.
12. With the image still selected, on the Picture Tools Format tab, under Quick Styles, apply the Drop Shadow Rectangle Style to the image. Use the Format Painter to apply the same Quick Style to the pictures on slides 2 and 3.
13. With slide 4 selected, on the Insert tab, in the Illustrations group, click the arrow next to shapes and under Stars and Banners select Explosion1. Draw another explosion shape slightly smaller than the one that is already there. The shape can be anywhere on the slide.
14. With shape still selected, on the Drawing tools, Format tab, select the arrow next to shape fill and select the **eyedropper**. Use the eyedropper square window to move to the right side of the slide to find the color RGB Light Blue. Apply that color to the smaller Explosion image.
15. With the smaller Explosion image still selected, move it so that it is layered on top of the larger Explosion image. Use the resizing handle to resize the lighter blue Explosion image so that it is now larger than the darker blue Explosion image. After resizing, it has a height of about 4" and a width of about 5".
16. With the lighter blue Explosion still selected, right click inside the image and select Move to Back. This will set the larger, lighter blue image behind the smaller, darker blue image. Move the images so that they layer on top of each other.
17. Select the smaller, darker image first, press and hold the CTRL key on your keyboard, and then select the larger, lighter blue image. With both images selected, on the Drawing Tools Format tab, in the Arrange group, select the arrow and then select Group. Notice how the two images are now grouped together and can be moved as one image.
18. Select slide 6 so that it is the active slide. On the Home Tab, in the Slides group, insert a new slide with the Title and Content layout. This will be the new slide 7.
19. On slide 7, in the Click to add title content placeholder type Enrollment Steps. In the text box below that, click the SmartArt icon to add a SmartArt graphic.
20. In the **SmartArt** graphic dialog box, under Process, select Step Down Process. Enter the

following text, in order, in the text boxes: 1. Get Admitted, 2. Determine Placement, 3. Register, 4. Pay. If the SmartArt only has three boxes, add a shape by going to the “Create Graphic” option in the SmartArt Tools Design tab and click add a shape.

21. With the SmartArt still selected, on the SmartArt Tools Design tab, select the arrow next to Change colors. Under Accent 2, select Gradient Range Accent 2.
22. Under **Quick Styles**, under Best Match select Intense. Select the entire SmartArt, and move it up slightly so there is additional white space below it. Deselect the SmartArt.
23. With slide 7 still active, on the Insert tab, in the Text group, select the arrow under **WordArt** and select the Fill-Blue, Accent1, shadow WordArt style. Click the outer edge of the WordArt text box to move it below the SmartArt. In the text box, type Register Early!
24. With the WordArt still selected, on the Drawing Tools Format tab, in the **Shape Styles** group, select the bottom arrow to see additional Shape Styles. Select the second Shape Style under **Theme Styles** Colored outline – Blue, Accent 1.
25. If necessary, decrease the font size of the Word Art to 32 and center the shape under the SmartArt.
26. On the Review tab, under Proofing, run Spelling and Grammar check and make any corrections.
27. Save your presentation, and take note of where it is located. There should be a total of 8 slides in your slide deck. Compare your presentation to the image below, and make any modifications if needed. Close out of PowerPoint and submit your entire presentation per your instructor’s instructions.



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## POWERPOINT PRACTICE 4



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<https://pressbooks.nsc.ca/intromsoffice/?p=213#oembed-1>

Complete the following Practice Activity and submit your completed project.



We will continue to work with the PowerPoint presentation from PowerPoint Practice 3. After submitting your presentation to the Director of Marketing, she has asked you to make a few enhancements that incorporate multimedia and statistical data. Key skills in this practice include screenshots, embedding videos, recording audio, background images, charting data with line and bar charts.

1. Start PowerPoint, notice how it opens in Backstage View. Under Open, browse to locate your PowerPoint\_Practice\_3, and select open.
2. Select File, Save As, Browse, and then navigate to your PowerPoint folder on your flash drive or other location where you save your files. Name the presentation as Yourlastname\_Yourfirstname\_PowerPoint\_Practice\_4.
3. There should be 8 slides in your slide deck. Ensure your presentation is in normal view and select slide 8.

4. With slide 8 still active, go to the Insert tab, Images group, **Screen Shot** and select **screen clipping**. Take a screen clip of the top portion of the NSCC home page, and insert it into slide 8. The screen clip should be under the Puma Commitment logo, and above the text box that contains the text: It is great to be a Puma!
5. With the screen shot image still selected, resize it so that it has an approximate height of 1.75" and an approximate width of 7.5". If necessary, move the Puma Commitment image up, and the text boxes down to create enough space for the screen shot image.
6. Select the screen clip image you just added, and on the Animations tab, in the Animations group, add the Fade animation to the screen shot image. On slide 8, in the notes pane, add the following note after the note that is already there: Then, explain all of the resources available on the NSCC Home Page.
7. Select slide 5. On the Home tab, in the Slide grouping, add a new slide with the Title and Content Layout. In the title placeholder type: NSCC Fine Arts.
8. In the content placeholder below the title, click the icon to insert an online video. To insert an online video, you can also use the Insert tab, Media group, video, online video. It may take a few moments for the Insert Video screen to load.
9. Use the Search YouTube box by typing in PVCCFineArts, and then selecting the search icon or pressing enter on your keyboard. Scroll through the videos to find the video titled Let it Be Summer 2020. If that video is not available, you can select a different one. Double click the video, or select Insert to add the video to slide 6.
10. With the video selected, on the Video Tools, Format tab, resize the video so that it has a height of approximately 5" and a width of approximately 9.4". Move the video so that it is center on the slide if necessary.
11. On the Playback tab, select Play to watch the video.
12. Another way to add an online video to a PowerPoint slide is by **embedding** it. Using your web browser, navigate to [www.youtube.com](http://www.youtube.com). In the search window, type, Let it be summer 2020. Locate the PVCC Fine Arts video Let it be summer 2020. Select the Share icon, and then select embed. Copy the embed code.
13. In PowerPoint, on slide 6, select the Insert tab, Media group, Video, Online Video. In the box next to From a Video Embed Code, paste the code you copied from YouTube and then press enter. It may take a few moments for the video to preview. If necessary, right-click on the video, and then select Preview. You can put the video in the presentation either way.
14. Select slide 9 so that it is the active slide. On the Insert tab, Media group, select the arrow under **Audio** and select Record Audio. Record a short audio clip (about 20 seconds) and tell me why PVCC is a great college.
15. After recording your audio and playing it back, name it PVCC. Then, close the Record Sound audio dialog box. Notice a speaker icon displays on slide 9. Move this icon to the upper left hand corner of slide 9. Click the speaker once to play the audio.
16. On slide 9, in the Notes pane, add the following note: Remember to play the audio.
17. Select slide 1 so that it is the active slide. Find the Image on this page with the sunset behind the cactus below. Right click this and save the picture as PowerPoint\_Practice4\_Step18. Make sure to save this in a file location you can find. On the Design tab, customize group, select Format Background. Under Fill, select the button next to Picture of texture fill. Under insert picture from file, select the File button and browse to where your files are stored. Locate the image PowerPoint\_Practice4\_Step18 (the one you just saved) and select Insert. Be sure to not select Apply to All, as we only want the **background image** applied to the title slide.



18. Close the Format Background dialog box by clicking the x in the upper right hand corner.
19. On slide 1, delete the text box that says Fall New Student Orientation. If necessary. Move the textbox that says Welcome Pumas up slightly, and change the font color to a font that is easier to see with the new background image.
20. Select slide 4 so that it is the active slide. Select and delete the Explosion image on slide 4. In that spot, we are going to add a clustered column chart that displays the Average GPA for each athletic team.
21. On the Insert tab, in the Illustrations group, select Chart. In the Insert chart dialog box, select column, and then **clustered column**, then select ok.
22. A dialog box should appear to Chart in Microsoft PowerPoint. It looks like a mini Excel spreadsheet. Enter the following data:

	Soccer	Golf	Tennis	CC	T&F	Baseball	Softball
Average GPA	4	3.5	3.8	3.75	3.6	3.75	4

24. Notice how the clustered column chart updates the data automatically as you type in the data. Close the Chart in Microsoft PowerPoint dialog box when all of the data has been entered.
25. With the clustered column chart selected, on the Chart Tools Design tab, select the arrow net to Add Chart Element. Next to Legend, select Right to move the Legend from the bottom of the chart to the Right side. If necessary, resize the legend so that all of the sports are visible.
26. Change the chart title to Average GPA by Team.
27. Select the vertical Axis, right click and select Format Axis. In the format Axis dialog box, set the Axis Options, Bounds to 3.0 for the minimum and 4.0 for the Maximum. Close the Format Axis dialog box.
28. With the clustered column chart selected, on the Chart Tools Design tab, in the Chart Styles group, select the Quick Style Style8.
29. Use the Smart guides to resize and move the clustered column chart so that it fits neatly to the right of the bulleted list on slide 4.
30. Select slide 5 so that it is the active slide. Select and delete the Health Sciences logo on slide 5.
31. On the Insert tab, select Line, and then insert a Line with Markers chart. Select OK to close the Insert Chart dialog box.
32. In the Chart with Microsoft PowerPoint dialog box, enter the following data:

	Health Sciences	STEM	CIT	Education
2018	500	300	550	200
2019	600	350	580	210
2020	700	400	600	300
2021	800	450	610	350

33. After the data is entered, close the Chart in Microsoft PowerPoint dialog box. Resize and move the chart to that it fits in the lower right hand corner of slide 5.
34. With the line chart selected, on the Chart Tools Design tab in the Chart Layout options group remove the chart title and ensure the legend is in the Top position.
35. With the line chart selected, on the Chart Tools Design tab, in the Chart Styles group, select Style 9 Quick Style.
36. Double click the vertical axis to open the Format Axis dialog box. Under Axis Options, Bounds, enter 200 for the minimum and 800 for the maximum. Close the Format Axis Dialog Box.
37. On slide 5, in the notes pane, add the following speaker note: This line graph displays our fastest growing 4 fields of interest over the past 4 years.
38. Select slide 2 so that it is the active slide. Select the image. On the Picture Tools, Format tab, in the Adjust group, select **remove background**. Select the area that you would like to keep, then select keep changes.
39. Change the view of your presentation to Slide Show. Use the arrows to advance each slide.
40. Save your presentation, and take note of where it is located. There should be a total of 9 slides in your slide deck. Compare your presentation to the image below, and make any modifications if needed. Close out of PowerPoint and submit your entire presentation per your instructor's instructions.





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## CHAPTER 3: GLOSSARY

**Definition of terms used in this chapter:**

Animations	a visual or sound effect added to an object or text on a slide
Animation Pane	the pane that displays additional options that can be applied to animations
Audio	sound files that can be recorded and embedded into a presentation
Background image	an image that can be added to the background of a PowerPoint slide and will be automatically resized to fill the entire slide
Clustered column	a type of chart that displays more than one data series in clustered vertical columns; commonly used for direct comparison of multiple series, but they become visually complex quickly
Contiguous	slides that are adjacent to each other in a presentation
Color Variant	a variation on the presentation theme style or color
Crop	a command that removes unwanted or unnecessary areas of a picture
Crop to shape	a command that removes unwanted or unnecessary areas of a picture and forms it into a specified shape
Effect options	additional enhancements such as sound and timing that can be applied to an animation
Embedding	the integration of links, images, videos, gifs, and other content from a variety of digital sources into a presentation
Eyedropper	a tool that captures the exact color from an object on your screen and then applies it to any shape, picture, or text
Fit	a function of the crop command that allows you to resize the picture so that the entire picture displays inside the picture area, while maintaining the original aspect ratio
Homepage	the main page of a website
Keep source formatting	maintains formatting options from the source file
Layout	the arrangement of elements in a PowerPoint slide such as title and subtitle, lists, pictures, shapes, charts, tables, and media
Lock aspect ratio	a graphic option in which the ratio between height and width remains constant but the height and width can increase or decrease
Microsoft PowerPoint	a presentation program used to create business, educational, or informal presentations
Noncontiguous	slides that are not adjacent to each other in a presentation
Normal view	the primary editing view in PowerPoint where you write and design your presentations
Notes pages	a printout that contains the slide image on the top half of the page and notes that you have entered on the notes pane in the lower half of the page
Notes pane	a printout that contains the slide image on the top half of the page and notes that you have entered on the notes pane in the lower half of the page
Online pictures	allows you to find and insert online pictures into your presentation from a variety of sources
Outline view	a PowerPoint view that displays the presentation outline to the left of the slide pane
Placeholder	a box on a slide with a dotted border that holds the title, body text, or other content such as charts, tables, and media



Presentation	the process of communicating a topic to an audience, typically a demonstration, introduction, lecture, or speech meant to inform, persuade, inspire, motivate, or build goodwill or to present a new idea or product
Presentation software	computer software used to display information in the form of a slide show, published to the web or recorded to watch as a video
Print options	although presentations are not typically printed, this will allow efficient options for when printing is necessary
Print preview	provides a preview of what the presentation will look like when printed
QuickStyles	styles listed in the styles list that can be accessed at any time; can be predefined or created
Reading view	a view in PowerPoint that displays a presentation in a manner similar to a slide show but in which the taskbar, title bar, and status bar remain available in the presentation window
Remove background	automatically removes unwanted portions of a picture, markers can be used to indicate areas to keep or remove from the picture
Reuse slides	allows you to take slides from an existing presentation and insert them into a new presentation without the need to open the old presentation; also allows you to keep the original formatting or apply the formatting used in your new presentation
Screen clipping	a type of screenshot that allows you to take a quick snapshot of part of the screen and add it into a presentation
Screenshot	a picture of one's computer screen that can be inserted into a presentation
Shape styles	applies preset colors and effects to quickly enhance the appearance of your shape or text box
Slide decks	a collective group of slides in a presentation
Slideshow	occupies the full computer screen exactly the way your presentation will look on a big screen when your audience sees it
Slide sorter	displays a miniature version of each slide
Slides	a presentation page that can contain text, pictures, tables, charts, and other multimedia or graphic objects
SmartArt	a visual representation of information that you create by choosing from among various layouts to communicate your message or ideas effectively
Smart guides	dashed lines that display on your slide when you are moving an object to assist you with alignment
Speaker notes	helps presenters recall important points, such as key messages or stats, as they give a presentation
Status bar	located at the bottom of the PowerPoint window and shows messages and information about the view, such as the slide number and the current theme template used
Template gallery	thousands of pre-made templates available in Google Slides
Templates	pre-made Google Slides presentations that can be used as-is, or modified to fit your needs
Themes	a set of unified design elements that provides a coordinated look for your presentation by applying colors, fonts, and effects
Theme styles	a coordinated group of theme attributes that can be applied to shape styles

Title slide	a slide layout that is commonly used as the first slide in a presentation and contains an introduction to the presentation
Transitions	motion effects that occur in slide show view when you move from one slide to another during a presentation
Trim	refers to taking off either part of the beginning or end of a media clip
URL	stands for Uniform Resource Locator, also commonly known as a web address
WordArt	a gallery of text styles with which you can create decorative effects, such as shadowed or mirrored

# CHAPTER 4: WORD PROCESSING

## Objectives



Word chapter 2 focuses on creating business documents. We will be covering the following concepts:

1: Type Letter Text

- 2: Apply Styles and Set Grammar and Spelling Options
- 3: Select and Insert Text
- 4: Copy, Cut, and Paste Text
- 5: Check Spelling and Grammar
- 6: Insert Synonyms
- 7: Use Format Painter
- 8: Apply Advanced Font Settings
- 9: Create Document Footers
- 10: Save Documents as PDF Files
- 11: Find and Replace
- 12: Bulleted and Numbered Lists
- 13: Set Paragraph Indents
- 14: Modify Line and Paragraph Spacing

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# LEARN IT



A **word processor** is software or a device that allows users to create, edit, and print documents. It enables you to write text, store it electronically, display it on a screen, modify it by entering

commands and characters from the keyboard, and print it. Of all computer applications, **word processing** is the most common.



Word Processing has evolved into much more than words typed on a piece of paper. It is a means to communicate with others, create content for websites, graphic design, **blogs**, and publications of all types. Modern word processing software and applications are integrated into the cloud. If you save your documents to your cloud-based storage, you can retrieve them from any device and continue to work with and share your documents.

## Common Word Processing Software:

- Microsoft Word

- WordPerfect
- Google Docs
- Office 365
- Apple Pages

Since Microsoft Word is widely used in industry, and we are using Microsoft Windows, we will focus on Word going forward. There are many similarities across word processing software, so the skills we are learning can be translated to other software and apps. The following 'Practice It' assignments are designed to be completed using the downloaded version of Microsoft Word in Office 365 on a PC with Windows 10 or higher.

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# WORD PRACTICE 1



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Complete the following Practice Activity and submit your completed project.

For our first assignment in Word, we will create a flyer to be printed or posted online. The flyer will advertise a volunteer opportunity for Health Sciences students at Paradise Valley Community College. Key skills in this practice are inserting text and pictures, textboxes, formatting text and footers.

1. Start Word. Click **Blank Document**.
2. Show **formatting marks** by navigating to the Home Tab, Paragraph Group, and selecting the Show/Hide icon. This is a **Toggle Button**. This means it has two modes, on and off. To turn it on, click it once, to turn it off, click it again.
3. Show the ruler by navigating to the View tab, Show Group, and selecting the Ruler **Check Box**. A Check Box is a type of input control. A checkboxes value is only included in the submitted *data* if the checkbox is currently checked. In other words, when the box is checked, the value is included.
4. Navigate to the File Tab to enter Backstage View. In backstage view, select File, then Save As. Click the Browse button. In the **Save As dialog box**, navigate to your file structure from the previous chapter, then open the Word folder. In the Name field, type Yourlastname\_Yourfirstname\_Word\_Practice\_1 as the file name, and then save.
5. Type *Volunteer Opportunity Available* and press Enter twice.
6. Type the following text: *This fall, Paradise Valley Community College is offering a unique volunteer opportunity for Health Sciences students.* Press spacebar.
7. Navigate to the Insert Tab, Text group, and choose the Object arrow. Then choose text from file. In the Insert File dialog box, browse to the location where you saved the files from Brightspace. Select the file Text\_Word\_Practice1. Click OK. The text will automatically update your document.
8. Select all of the text in the document. On the Home Tab, Font Group, ensure the Font is Calibri and font size is 12.
9. Select the title, Volunteer Opportunity Available, including the paragraph mark. On the Home

Tab, Font Group, select the arrow next to **Text Effects and Topography**. In the third row, third column, apply the Fill: Blue, Accent color 5; Outline: White, Background color 1; Hard Shadow: Blue, color 5 text effect.

10. With the title still selected, change the font size to 36.
11. On the Home Tab, Paragraph Group, choose Center to align the title centered on the page.
12. On the Home Tab, Font Group, change the font color to Blue, Accent 1 for the title.
13. With the title still selected, on the Home Tab, in the Font Group, choose the arrow next to the Text Effect and Typography icon. Apply a Shadow and under Inner, click Inside: Right text effect.
14. Position the insertion point at the beginning of the paragraph that begins with This Fall.
15. On the Insert tab, Illustrations group, choose **Pictures**. Navigate to your saved files from Brightspace and choose the HSPicture\_Word\_Practice1 image.
16. Be sure the picture is selected, and apply the **Square text wrapping** option. The Layout Options icon will appear to the right side of the image, click and look for “with text wrapping” options and select Square.
17. Using the sizing handle at the lower right hand corner of the picture, drag up and to the left until the bottom of the graphic is aligned at approximately 3.5 inches on the vertical ruler (top of page, below ribbon).
18. Click Undo to return the picture to its original size. The Undo icon is located in the quick access toolbar in the upper left hand corner.
19. On the Picture Tools, Format tab, in the size group, change the shape width to 4”.
20. On the **Quick Access Toolbar**, click the Save icon. Then, compare your document to the image below.

Note: You may want to toggle the show/hide off so that you can see how the document will look when printed, or posted online.



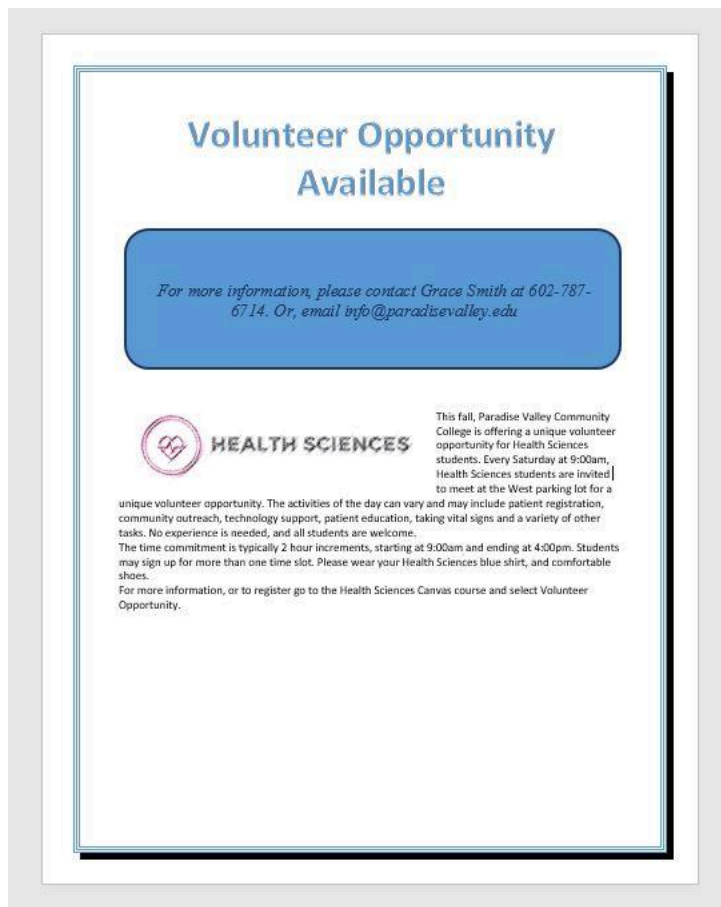


21. Ensure the picture is still selected. Display the Layout dialog box by selecting the **Layout Options** shortcut menu, then choose see more. In the Layout dialog box for the picture, make sure the Position tab is selected.
22. Set the horizontal alignment to Left, relative to Margin.
23. Set the vertical alignment to Top, relative to Line. Select OK to close the dialog box.
24. With the picture selected, apply the Drop Shadow rectangle picture effect. This is on the Picture Tools Format Tab, Picture Styles group, under Picture Effects, Soft Edges.
25. With the picture selected, on the Picture Tools, Format tab, in the Adjust Group choose the **Artistic Effects** arrow. Apply the Pastels Smooth artistic effect. Deselect the picture.
26. On the Design Tab, in the Page Background Group, select Page Borders. Add a **page border** selecting the:
  1. Shadow setting
  2. Triple Lines style
  3. Blue, Accent 1 color
  4. Whole document
27. Position the insertion pointer at the blank paragraph below the title and press Enter six times.
28. On the Insert Tab, in the Illustrations group, choose **Shapes**. Insert a Rounded Corners Rectangle shape at the left margin until approximately 1.5 inches (width) on the vertical ruler. Click once to insert a 1-inch by 1-inch Rounded Rectangle, or use the drag and drop feature.

29. On the Drawing Tools, Shape Format Tab in the Size group, Change the shape height to approximately 1.8 and the shape width to 6.4.
30. Select the Rectangle shape and type the following text: *For more information, please contact Grace Smith at 602-787-6714. Or, email info@nsc.ca*
31. Italicize the text, change the font to Calibri and increase the font size to 16. Deselect the text.
32. Select the same text as above and explore the **mini-toolbar**, by clicking the Font Color button arrow and under Theme Colors, click on Blue, Accent 5, Darker 50%.
33. With the shape still selected, go to the Drawing Tools, Format Toolbar, the **Shape Styles** Group. Select the arrow next to **Shape Outline** and under Theme Colors, click on Blue, Accent 5, Darker 50%. Change the weight to 3pt.

Compare your document to the image below.

Note: It is ok if your document does not look exactly like the screenshot below. This is your first attempt at practicing a new skill. You will have the opportunity to make final adjustments, using the skills you learned, at the end of this practice.



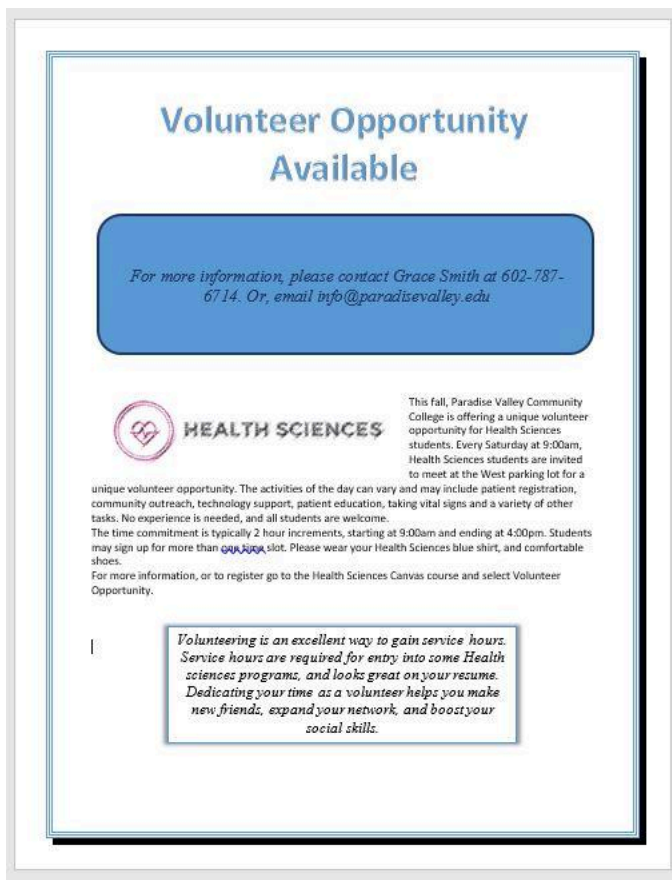
34. Using the **keyboard shortcut** CTRL+END , navigate to the end of your document. If your keyboard does not have these keys, click to put your insertion point after the period on opportunity. Hit enter 3 times.
35. Your insertion point should be approximately at the 8" mark on the horizontal ruler. On the Insert tab, in the text group, click the arrow next to the **textbox** and draw a text box at approximately the 1" mark on the vertical ruler. Draw a text box by dragging down to create a

text box that is approximately 1.5 inches high by 4.5 inches wide. Type the following in the text box: *Volunteering is an excellent way to gain service hours. Service hours are required for entry into some Health sciences programs, and looks great on your resume. Dedicating your time as a volunteer helps you make new friends, expand your network, and boost your social skills.*

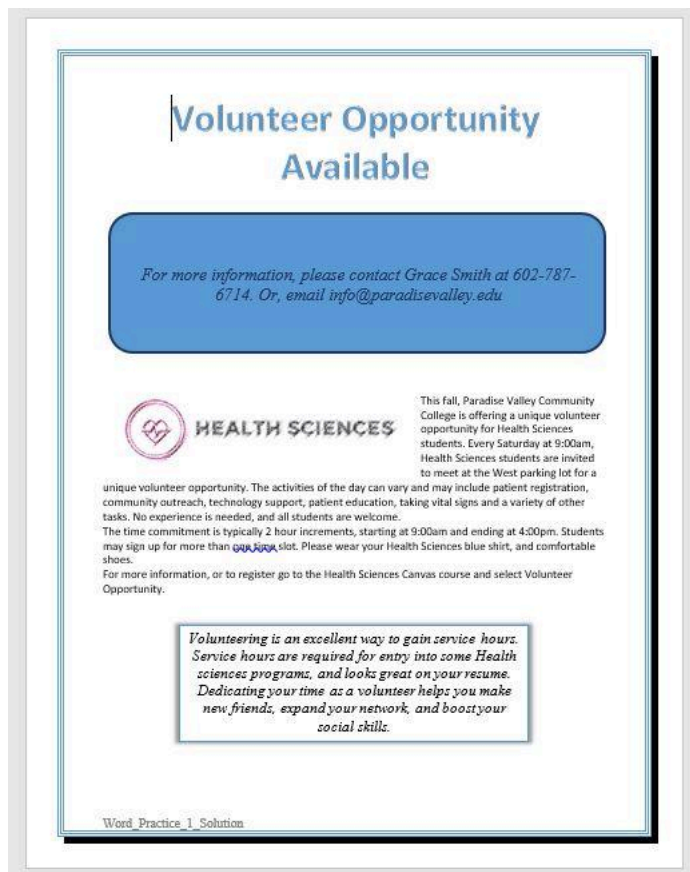
36. Select and Drag the textbox, by clicking and holding on the outer edge, until the horizontal green **alignment guide** displays above the first blank paragraph mark and the vertical green alignment guide displays in the center of the page. To be more precise:
  - In the Layout dialog box on the Position Tab for the text box set the horizontal alignment to Centered, relative to Margin.
  - Set the Vertical alignment by typing .25 in the Absolute position box and selecting Below Paragraph.
37. On the Size tab, type 1.5 in the Absolute Height box and 4.5 in the Absolute Width box. Then, click OK.

Note: For a reminder on how to set up the 'precise layout', review step 21.

38. With the textbox still selected, on the Drawing Tools, Shape Format Tab, in the **Shape Styles** group Apply the Colored Outline – Blue, Accent 1 shape style.
39. Under **Shape Effects**, apply the Offset Center outer shadow shape effect to the text box.
40. Select the text in the text box, change the font size to 13 italics, and center the text.
41. Save the document. Compare your document to the image below.



42. On the Insert tab, in the Header & Footer Group, choose Edit Footer. On the Header & Footer Design Toolbar, in the Insert Group, choose Document Info. Use Document Info to insert the file name in the footer. Select the File Name **Field**. The File Name should display in the lower right hand footer of the document. Do not type it in, rather use the Document Info Field.
43. In Backstage view, click “Info” on the right side of the screen above “save a Copy”. Click on Show All Properties, and add the following properties:
  - In the **Tags** box: trainee, flyer, internship
  - In the Subject box: Your course name and course code (Business Computer Applications, COMP 1050)
  - In the Author box: Your first and last name (Note: your name may already appear here, if so leave as is)
44. Turn off formatting marks. As a reminder, formatting marks are on the Home Tab, Paragraph Group.
45. Take a moment to compare your document to the image below and make any modification based on what you have learned.



47. Zoom in to view the document in a larger size. Zoom is located in the lower right hand corner of the Word window.
48. Save again, and ensure you have your file saved in a safe location. Take note of that location because you will need to find your file to upload it for grading.
49. Upload your file to the appropriate assignment box on Brightspace.

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## WORD PRACTICE 3



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Complete the following Practice Activity and submit your completed project.



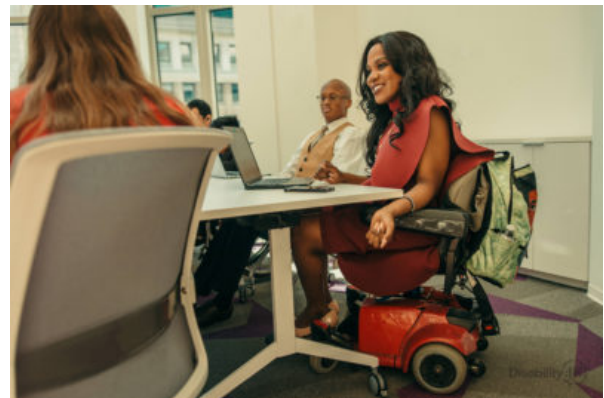
For Word Practice 3, we will use Word to create a **resume** that will be used to apply for a Help Desk position at the NSCC Help Desk. Key skills in this practice are creating and modifying tables, and sharing documents online.

1. Launch Microsoft Word. Click Blank Document.
2. Show formatting marks and show the ruler.
3. Save the document as Yourlastname\_Yourfirstname\_Word\_Practice\_3 in your Word Folder.
4. On the Insert Tab, in the Header and Footer group, Choose **Footer**, then Edit Footer. In the Header and Footer Toolbar, Design Tab, in the Insert Group, choose the arrow under Document Info. Add the file name to the footer. Exit the footer.
5. At the top of your document, Insert a 2 X 4 **table**. To insert a table, navigate to the Insert Tab, Tables Group, and drag your cursor in the grid to create a table with two columns and four rows.
6. Beginning with the first **cell** in the table, type each of the following:
  - PROFESSIONAL OBJECTIVE [Press Tab]

- Desire a Help Desk Assistant position where I can use my expertise in providing desktop and application support to users. [Press Tab]
  - QUALIFICATIONS [Press Tab]
  - A results-oriented help desk specialist experienced in providing in-depth customer support. [Press Enter]
  - Demonstrated ability in diagnosing problems. [Press Enter]
  - Extensive end-user training experience. [Press Enter]
  - Capable of working with a diverse customer base. [Press Enter]
  - Experienced in different operating systems and applications. [Press Tab]
7. In the third row, type WORK EXPERIENCE and press Tab.
  8. Using the Insert Text from File function, insert the text from Text\_Word\_Practice3 (downloaded file from Brightspace). To insert text from file navigate to the “Insert” tab and select the drop down arrow beside Object in the Text group.

Check to see if the **Resume Assistant** displays on the Review tab. If not, go to the next step. If so, click Resume Assistant, click Get Started button, add the role, Help Desk Assistant, and add the technology industry. Scroll down to view more resumes, interesting articles and a link to get started on LinkedIn. Close the Resume Assistant.

9. Remove the blank line at the end of the inserted text.
10. In the fourth row, in the column to the left, type EDUCATION AND CERTIFICATIONS and press Tab.
11. Type the following, pressing Enter at the end of each line except the last one:
  - University of Youngstown, Youngstown, OH
  - Bachelor of Science degree in Computing, 2020
  - Microsoft Certified Solutions Expert (MCSE)
  - CompTIA A+
  - CompTIA Network+
  - CompTIA Security+
12. Select all the text in the cell to the right of QUALIFICATIONS, apply bullets, and decrease the indent. The bullets and decrease indent are located on the Home Tab, Paragraph Group.
13. Use the Format Painter (located on the Home tab, Clipboard group) to copy the bullets and the decrease indent to the description of the work experience.
14. In the text next to EDUCATION AND CERTIFICATIONS, apply bullets to the list. Ensure the bullets align with the other bullets in the document. Increase the indent for the Bachelor of Science Degree.
15. Drag the table vertical border between the two columns until the white arrow on the ruler is



at approximately 1.5 inches on the horizontal ruler.

16. Select the text in the first column. Ensure all of the text in the first column is left aligned.
17. On Table Tools, Layout Tab, Cell Size group, using the Width box down spin arrow, set the column width to 1.4 for the first column.
18. Click Auto-fit and select Auto-fit Window.
19. Use the **one-click Row/Column insertion** button to insert a new row above EDUCATION AND CERTIFICATIONS.
20. In the left cell of the new row and type TECHNICAL SKILLS and press Tab.
21. In the second column, type the following, pressing Enter at the end of each line, except the last one:
  - Platforms: Windows 10, MacOS, Unix
  - Applications: Microsoft Office 365, Norton/McAfee Anti-Virus, Norton Internet Security, Photoshop
  - Strong knowledge of LAN and WAN technologies
  - Solid knowledge of Oracle Help Desk system
22. Apply bullets to the Technical Skills list. Ensure the bullets align with the other bullets in the document.
23. In the top row of the table change the top and bottom cell margins to 0.04. Cell margins are on the Table Tools Layout Tab, Alignment Group. Remove any extra spaces or lines in the first row of the table.
24. At the top of the document, insert a row above the first row. On the Table Tools Layout Tab, in the Rows & Columns Group, choose Insert Above.
25. Select the entire first row that you just added. On the Table Tools Layout Tab, Merge the two cells in the top row.
26. In the first row of the table type:
  - Matt Smith [Press Enter]
  - (867) 555-1012 [Press Enter]
  - 1254 Success Way, Phoenix, AZ 85320 [Press Enter]
  - msmith@pacifica.net[Press Tab]

Note: Pressing Tab would move to the next cell, whereas pressing Ctrl + Tab moves within the cell.

26. Select Matt Smith and use the mini-toolbar to bold and italic and change the font size to 14.
27. Select all of the text in the first row. On the Home tab, expand the paragraph settings of the Paragraph group and set Spacing Before and After to 0 pt. Remove any extra line spacing.
28. With all of the text still selected in the first row, center all of the text.
29. Beginning in the second row, italicize and bold all of the headings in the left-hand column.
30. In the cell to the right of WORK EXPERIENCE, italicize and bold the job title 'Help Desk Technician'.
31. In the cell to the right of EDUCATION AND CERTIFICATIONS, bold University of Youngstown. Place cursor at line beginning with Bachelor, on the Home tab, expand the paragraph settings of the paragraph group and change the Spacing After to 12 pt. If necessary,



deselect the Don't add space between paragraphs of the same style box.

Leaving this selected will result in no space being added.

32. In the cell to the right of WORK EXPERIENCE, select Help Desk Technician and set the spacing to 12 pt. after. If necessary, deselect the Don't add space between paragraphs of the same style box.
33. Select the entire table and remove all the borders. There are a few ways to do this:
  - Click the cross hair indicator in the upper left hand corner of the table
  - Start at the top of the table and click and drag to select the entire table
  - Use the shortcut key CTRL + A
34. On the Table Tools, Design Tab, in the Border Group, select No Border.
35. With the table still selected, On the Table Tools, Design Tab, in the Border Group, select Borders arrow and select Borders and Shading. In the borders and shading dialog box, apply the "thick upper line and thin lower line" table style to the top of the table and the "thin upper line and thick lower line" to the bottom of the table.

- 
36. In the line beginning with (867) 55-1012, change the Spacing Before to 12 pt (found on Layout tab).
  37. In Backstage View, display the print preview under Print. If necessary, exit Backstage view and make modifications. Compare your documents to the image below.

- 
38. In Backstage View, under Info, show advanced properties and type in the tags box 'resume'.
  39. Type your course name and course code (Business Computer Applications, COMP 1015) in the Subject box and be sure your name is in the Author box.
  40. Upload your file to the appropriate assignment box on Brightspace.

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## WORD PRACTICE 6



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**Complete the following Practice Activity and submit your completed project.**

For Word Practice 6, we will use Word to create a **newsletter** for Health Sciences students at PVCC. Key skills in this practice are formatting text as columns, editing pictures, inserting screen clips, symbols and special characters.

1. Start Word and open Starter\_Word\_Practice6. Save the file as Yourlastname\_Yourfirstname\_Word\_Practice\_6 in your Word folder.
2. Using Document Info, insert the file name in the footer.
3. Select the first paragraph that begins with Paradise Valley and apply Bold text and change the font color to Blue-Grey, Text 2 (If you cannot find this exact color, chose a blue under the theme color. then for each time in this practice this color appears again, choose the same blue you chose).
4. With the title still selected, go to the Home Tab, Paragraph Group, select the arrow next to Borders and choose Borders and Shading to launch the Dialog Box. Add a Blue-Gray, Text 2, Darker 25%, 2¼ pt solid line bottom border.
5. Select all the text beginning with Health Sciences Newsletter down to the end of the document **excluding** the final paragraph.
6. On the Layout Tab, Page Setup Group, Set the columns to two. Compare your screen to the image below:

7. With the two columns of text still selected, expand the paragraph setting of the Paragraph group, change the spacing after to 6 pt and change the alignment to justified.
8. Position the insertion before December Birthdays and insert a column break on the Layout tab, breaks group, and select column. This will ensure the column of December Birthdays is a new column.
9. Position the insertion point at the end of the document in the empty space after the paragraph that begins with When you are finished...
10. On the Insert tab, Illustrations Group, Select Pictures. Browse to where your downloaded files from Brightspace are stored and insert the Health Sciences Logo named Word\_Practice\_6\_Image1.
11. With the picture selected, on the Picture Tools, Format toolbar set:
  - The picture height to 2.0".
  - The text wrapping layout to Top and Bottom.
  - The horizontal alignment to Centered, relative to Column.
  - The vertical alignment to Bottom, relative to Margin.
  - Select OK.
12. With the picture selected, on the picture tools, Format toolbar, in the Size group, choose the arrow under Crop.
13. Using the Cropping handles on the picture, crop the picture by using the far right crop handle and dragging to the left until only the circle heart logo is visible. Everything in the gray area will be cropped. The cropped image should look something like this:

14. With the image still selected, choose more layout options. Use the Text Wrapping tab to change the layout text wrapping to Square. Expand the size group settings, click the Size Tab and uncheck the Lock aspect ratio box.
15. Use the Position tab to set the horizontal alignment to Centered, relative to Page. Under options, choose **Lock Anchor**. Click OK, to exit the dialog box.
16. With the image still selected, zoom to 200%.
17. On the Picture Format Tab, Adjust Group, choose the arrow next to Corrections. Under **Sharpen/Soften**, choose Sharpen 50%.
18. Under Color, choose Saturation 400% for the **Color Saturation**.
19. Under Corrections, set the Brightness/Contrast to Brightness: +20% Contrast +20%.
20. With the picture still selected, set the Zoom back to 100%.
21. Resize the picture to 2.17" for the height and 2.65" for the width.
22. With the picture still selected, on the Picture Tools, Format toolbar, in the Arrange Group, choose the arrow next to Rotate. Then choose Flip Horizontal.
23. Near the top of the document in the left column, delete the word December. Position the insertion point in the blank paragraph under Health Sciences Newsletter.
24. Open a new web browser window and navigate to <https://www.paradisevalley.edu/degrees-certificates/health-sciences>.
25. Redisplay the newsletter, and ensure the insertion point is in the paragraph below Health Sciences Newsletter. On the Insert tab, click Screenshot, and then click **Screen Clipping**. Drag from the upper left corner of the browser below the address bar to the lower right corner above the taskbar. Your screen clip may vary based on the resolution and web browser utilized.
26. With the Screen Clip selected, resize height to .8" and the width to 3.12. You may need to uncheck "lock aspect Ratio" to do so. Adjust settings as needed to accomplish this task.
27. With the picture still selected on the Picture Format tab, choose **Quick Styles** and select the first Style: Simple Frame White.

Note: After inserting the screen clip, you may need to readjust the position and the size of the logo at the bottom of the document. Since the Text Wrapping is set to Square, you can manually adjust it by selecting and dragging it. The newsletter should only be one page.

28. Near the top of the document, select the text Winter Scholarship Fundraiser and:
  - Change the font color to Blue Gray Text 2.

- Apply Bold
29. With the text still selected, launch the Font dialog box. Under effects, choose the checkbox next to **small caps**.
  30. Using **Format Painter**, apply the same formatting to each of the heading paragraphs. To use the Format Painter, select the text. Then select the Format Painter icon on the Home Tab, Clipboard Group. Then select the text that you would like to apply formatting to.
  31. In the paragraph under the heading Winter Scholarship Fundraiser, delete the comma and space between Sylvia Haines and her title and insert an **em dash**. This is a **special character** located on the Insert Tab, Symbols Group, Symbol, More Symbols, Special Characters, Em Dash.
  32. Select the title of the document that begins with Paradise and ends with 85032.
    - Apply a Blue Gray Text 2, 1½ pt shadow border
    - Apply a Blue Gray Text 2 Lighter 60% shading fill
    - Center the text
  33. Position the insertion point in the second column, towards the bottom of the document under Main Campus. On the Insert Tab, Text Group, Select the arrow next to **Word Art**. In the second row, the second column choose the Word Art Style Gradient Fill-Blue, Accent 1, color 5; Reflection.
  34. With the Word Art still selected use the drag and drop technique to position it centered in the column. Ensure the font size of the WordArt is 28. In the WordArt type: We appreciate you!
  35. On the Design Tab, Choose Page Borders. In the Page Borders Dialog Box, choose the Box Border, the style with a thick upper line and thin bottom line, Automatic color, 3pt width, to the whole document.
  36. In Backstage view, add newsletter, March to Tags, course name and course code to Subject, and make sure your name displays as Author.
  37. Save the document and compare it to the image below. Make any adjustments before submitting to the appropriate assignment box on Brightspace.





An interactive H5P element has been excluded from this version of the text. You can view it online here:  
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## CHAPTER 4: GLOSSARY



**Definition of terms used in this chapter:**

Alignment guide	a green vertical or horizontal line that displays when you are moving or sizing an object to assist with proper placement
Artistic effects	formats applied to images that make pictures resemble sketches or paintings
Blank document	a starting point for creating a new document in Microsoft Word
Blogs	a regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style
Bullet	text symbol such as a small circle that precedes each item in a list
Bulleted list	a list of items in no particular order that are preceded by a bullet for emphasis and organization
Format painter	allows you to copy formatting from one item and apply it to another
Cell	the intersection of a row and column in a table
Check box	a small box that can be clicked to indicate a check is turned on or off to indicate an on or off response
Cover letter	a letter of introduction that highlights key points in the resume that follows
Ellipses	informally as dot-dot-dot, is a series of dots that indicates an intentional omission of a word, sentence, or whole section from a text without altering its original meaning. When selected, additional options appear
Em dash	a punctuation symbol that indicates an explanation or emphasis
Field	placeholders that store and display data, and can perform simple tasks like returning the page number or current date and time
Footer	the bottom margin of each page
Formatting marks	characters that display on the screen but do not print, indicating where the Enter key, the Spacebar, and Tab key were pressed, also called non-printing characters
Indentation	specifies the distance between where the lines in a paragraph start in relation to the left or right margins
Inside address	the name and address of the person of business who received the letter, positioned below the dateline
Keyboard shortcut	one or more keys used to perform a menu function or other common functions
Layout options	picture formatting options that control the manner in which text wraps around a picture or other object
Leader	the space between tab stops can show a line, dots, or dashes to line up information and guide the reader
Letterhead	the heading at the top of a sheet of letter paper that typically includes name and address or company logo
Lock anchor	a feature in word that allows you to move your image to any position on the same page as the anchor paragraph which forces the object to stay in that position
Mini toolbar	appears whenever you right-click text in Word, Excel, or PowerPoint and provides a quick-access version of the Font group on the Home tab, plus a few extra buttons from other groups

Newsletter	a printed or electronic report containing news regarding updates for an organization or business and is sent to interested parties
One-click Row/Column insertion	a feature in Word tables that allows users to insert a new row or column by pointing to the desired location and then clicking once
Page border	a decorative border that appears outside the margins on each page and can be solid, dashed, or an artistic style
Pictures	images or graphics that are stored locally on a computer or flash drive and can be uploaded to a document to add visual interest
Present online	a Word feature that allows you to share your documents online using a web browser
Quick access toolbar	located above the Ribbon (top-left) and provides access to commonly used features and commands, such as Save and Undo/Redo, and is customizable
Quick styles	an efficient way to add effects to a picture such as a shape, border, and other effects
Resume	a formal document that provides an overview of professional qualifications for an employment opportunity
Resume assistant	a feature in Word where you can see suggestions from LinkedIn to enhance your resume
Save As dialog box	allows the user to specify the drive, directory, and name of a file to save their file
Screen clipping	allows you to capture an image from your screen
Shape effects	a grouping of coordinating effects that can be applied to a shape including shadows, glows, reflections, soft edges, bevels, and three-dimensional (3-D) rotations
Shape outline	allows you to change the outline color, weight (thickness), and style of the outline surrounding a shape
Shape styles	allows you to apply preset colors and effects to quickly change the appearance of your shape
Shapes	Lines, arrows, stars, banners, ovals, rectangles, and other basic shapes with which you can illustrate an idea, a process, or a workflow
Sharpen/ Soften	a way to enhance picture details or make pictures more appealing by removing unwanted blemishes on a picture
Small caps	an attractive font in which no lowercase letters are used, yet the height of lowercase letters are maintained
SmartArt	a graphical tool that adds visual interest
Special character	normal characters that don't appear on standard keyboards; but once inserted into a Word doc, they look the same as keyboard characters
Spelling and grammar check	identifies spelling and grammatical errors and provides suggestions for correction
Square text wrapping	the manner in which text displays around an object
Tab indicator	a button to the left of the ruler that provides tab marker options
Tab stop	the horizontal position which is set for placing and aligning text on a page

Table	an arrangement of information organized into rows and columns
Tags	any word, phrase, or number string related to the file that may help you locate the file later
Text box	a moveable, resizable container for text or graphics
Text effects and typography	decorative formats, such as shadowed or colors that make text stand out
Toggle button	a button that can be turned on and off by clicking it once to turn on, and clicking again to turn it off
WordArt	gallery of text styles that you can add to your publications to create decorative effects, such as shadowed or mirrored (reflected) text
Word processing	the act of using a computer program to create, edit, and print documents
Word processor	software or a device that allows users to create, edit, and print documents
YouTube	a free video-sharing website

# CHAPTER 5: SPREADSHEETS

## Objectives



Chapter 3 uses spreadsheets to organize data, calculate numbers, make charts and more. We will be covering the following concepts:

- 1: Define the functions of spreadsheet programs as used in business.
- 2: Construct, test, implement, and analyze spreadsheets that solve financial, mathematical, and statistical problems in business.
- 3: Create and edit charts and graphs to interpret spreadsheet data.

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# LEARN IT



A **spreadsheet** is a file with **cells** in **rows** and **columns** and can help arrange, calculate and sort data. Data in a spreadsheet can be numeric values, text, formulas, references and functions. We will

even learn ho



w to embed charts and graphs into a spreadsheet. Spreadsheets are used to visualize data in a meaningful way that can be used to make complex decisions. Spreadsheets can take raw data, and tell a story with it.

Common Spreadsheet Software

Software Name	Type	Key Features
Microsoft Excel	Commercial	Runs on Windows and MacPart of Office 365 Recent features include robust formulas and functions, charts, graphs, and sparklines Arguably the most popular spreadsheet software
Google Sheets	Online	Included as part of a free, web-based software office suite offered by Google within its Google Drive serviceAllows users to create, view, and edit files online while collaborating with other users in real-time Available as a web application supported on Google Chrome, Mozilla Firefox, Internet Explorer, Microsoft Edge, and Apple Safari web browsers Compatible with Google Drive
Apple Numbers	Online	Part of the iWork productivity suite and runs on the MacOS, iPadOS, and iOS operating systemsUsers feel that it is an easy-to-use application that allows them to quickly create spreadsheets on their Apple devices

Going forward, we will focus primarily on Microsoft Excel.

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# EXCEL PRACTICE 1

## Practice It



Since Microsoft Excel is widely used in industry, and we are using Microsoft Windows, we will focus on Excel going forward. There are many similarities across spreadsheet software, so the

skills we are learning can be translated to other software and apps. The following 'Practice It' assignments are designed to be completed using Microsoft Excel in Office 365 on a PC with Windows 10 or higher.



We will use Excel to perform complex calculations, analyze data so that we can make intelligent decisions, and create visually interesting charts and graphs that help us understand the data. Since Excel is used for Data Analysis, it is best to use a keyboard and mouse or touchpad rather than the touchscreen.

In Excel, data is stored in a **cell**. **Cell content** is anything that is stored in the cell and can be either a **constant value** or a **formula**. The most commonly used **values** are **text values** and **number values**. Values can also be a date or time. A text value is also referred to as a **label**.

**Prefer to watch and learn? Check out this video tutorial:**



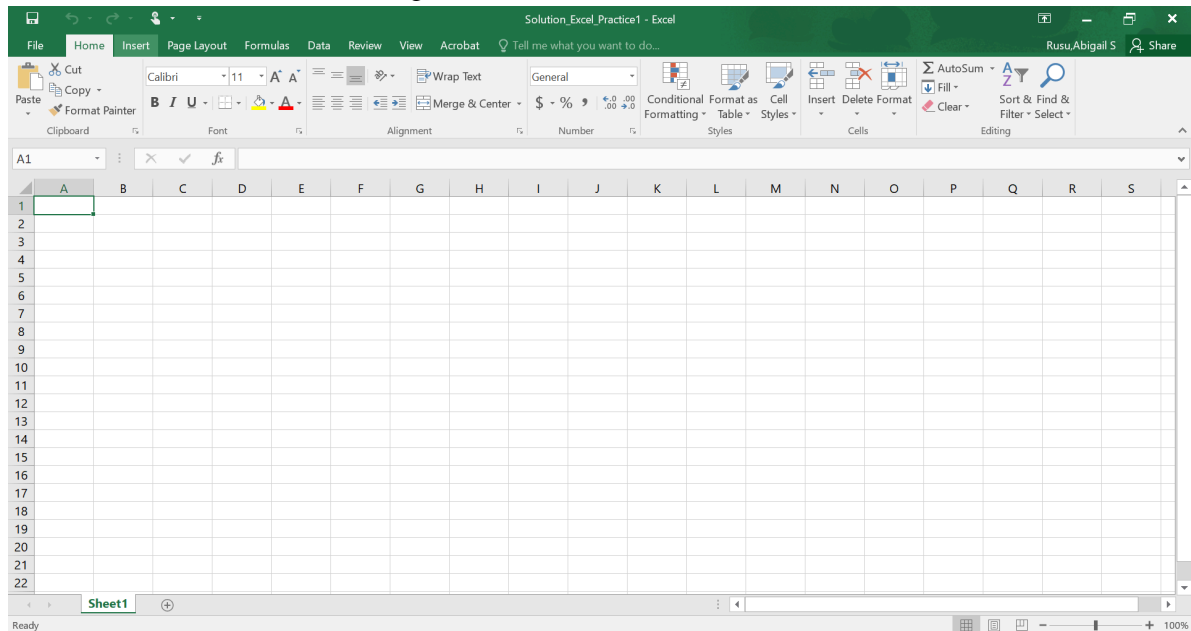
One or more interactive elements has been excluded from this version of the text. You can view them online here:  
<https://pressbooks.nsc.ca/intromsoffice/?p=118#oembed-1>

**Complete the following Practice Activity and submit your completed project.**

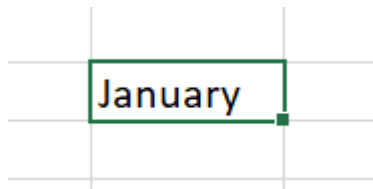
For our first assignment in Excel, we will create a spreadsheet with monthly expenses. This

spreadsheet will provide us with an overall picture of our financial health by helping us understand where we are spending our hard-earned money. We will start with a new blank Excel Spreadsheet.

1. Start Excel. Click **Blank Workbook**.
2. Select File, Save As, Browse, and then navigate to your Excel folder on your NSCC OneDrive or other location where you save your files. Name the **workbook** as Yourlastname\_Yourfirstname\_Excel\_Practice\_1.
3. Take a moment to locate the following components of the Excel workbook window. Notice how **Columns** are lettered and **Rows** are numbered. The intersection of a row and column is a **cell**. The **active cell** in the image is A1.



4. Notice the vertical and horizontal scroll bars. Use the arrows to practice scrolling on the page.
5. In cell A1, type “My Budget By Month” and press Enter.
6. In cell A2 Type “For the First Quarter” and press Enter.
7. In the **Name Box**, change A3 to A4 and then press Enter. Notice how the active cell changed to A4.
8. Starting in cell A4, Type each of the following (excluding the circle bullets), pressing Enter after each:
  - Housing
  - Groceries
  - Utilities
  - Misc Expenses
  - Monthly Total
9. In cell B3, type January and press Enter.
10. Select cell B3 and use the **fill handle** to drag to cell D3. Notice how the names of the months automatically generate. The fill handle enables **auto fill**, which generates and extends a series of values into adjacent cells based on the value of other cells.



11. Adjust the column width for column A to Width 18.71 (136 pixels) by dragging the right boundary (between columns A and B) to the right.
12. Select the **range** B3:D3 and center the text.

Note: A range in Excel is two or more cells on a worksheet that are adjacent (next to each other) or nonadjacent (not next to each other). To select nonadjacent ranges, use the CTRL key on your keyboard.

13. In cell B4, type 1200 and enter the remaining numbers as shown:

	January	February	March
Housing	1200	1200	1200
Groceries	200	250	275
Utilities	85	80	90
Misc Expenses	20	50	30

14. In cell B8, type =b4 + b5 + b6 + b7 and press Tab.
15. In cell C8, type =c4 + c5 + c6 + c7 and press Tab.

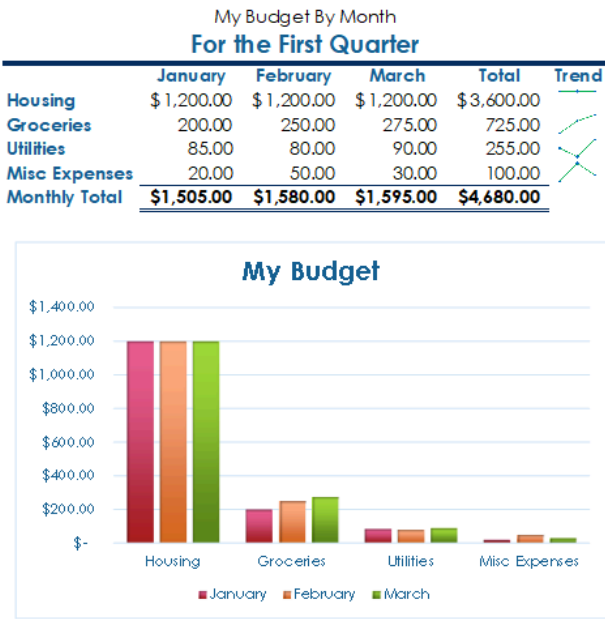
Note: Using this technique we are manually entering a formula that sums a range of cells. Notice the **Formula Bar** as you enter in your formula. The formula bar displays the **Underlying Formula**.

16. A quicker way to enter in a formula is with a **function**. We will use the **SUM function** next. In cell D8, click AutoSum on the Home Tab, Editing Group and press Enter.
17. In cell E3, type Total and then press Enter.
18. Click in cell E4, Press Alt and + = key. This is a **keyboard shortcut** that enters the Sum function. If the keyboard shortcut does not work (this is common due to variations in keyboards), use the AutoSum technique from step 16.
19. Click the Enter button on the Formula Bar which is the green or blue check mark.
20. With Cell E4 selected, drag the fill handle in cell E4 down through cell E8.
21. Click in cell F3, type Trend and press Enter.
22. Click in cell A1, and drag your cursor to the right to select the range A1:F1. On the Home tab, in the Alignment Group, choose **Merge and Center**. The title should be Merged and centered in the range A1:F1.
23. Using the same technique, Merge and Center the title in the range A2:F2.
24. Apply the Title style to cell A1 and the Heading 1 style to cell A2. Cell styles are on the Home Tab, Styles Group, then choose the arrow next to **cell styles**.

25. Apply the Heading 4 style to the ranges B3:F3 and A4:A8. You can select the first range, hold down the CTRL key, and select the second range, then apply the cell style. Or apply, one at a time.
26. Apply the **Accounting number format** to the ranges B4:E4 and B8:E8. The number format is located on the Home Tab, Number Group. Select the arrow to view a drop down list of all number formats.
27. Apply the **Comma number style** to the range B5:E7. This is located on the Home Tab, Number Group, and select the comma.
28. Apply the Total number style to the range B8:E8. Cell styles are on the Home Tab, Styles Group, then choose the arrow next to cell styles.
29. AutoFit column D. Select column D by clicking on the D Column Header. Then, double click the line between the D and E. Or, with Column D selected, on the Home Tab, Cells Group, click the arrow next to Format and choose auto fit for the Column.
30. Apply the Slice **theme** to the Workbook. On the Page Layout Tab, in the Themes Group, choose Slice. If necessary, adjust the total cells, or any other cells to ensure you can see all of the cell content.
31. Select the range A3:D7.
32. On the Insert tab, in the charts group, click Recommended Charts, click All Charts, select Clustered Column chart and then click OK.
33. With the chart selected, under the Chart Design Tab, in the Chart Layouts Group, Choose the Add Chart Element and ensure the Chart Title is 'Above Chart'. Change the Chart Title to My Budget.
34. Drag the chart by clicking and holding any of the chart outer lines using the four-sided arrow mouse pointer. Move the chart so that the upper left corner is inside cell A10.
35. Ensure the chart is still selected, and apply Chart styles, Style 6. Chart styles are located on the Chart Design Tab, under Chart Styles. Click the down arrow ("more" button, which is the upside-down triangle with the line above it) to see all of the Chart Styles.
36. Using Change Colors select Colorful Palette 4. The Change Colors button is located on the Chart Tools, Design Tab, under Chart Styles
37. Select the range B4:D4 and insert a Line **sparkline** in cell F4. Be sure to not include the totals in the sparkline range. Sparklines are located on the Insert Tab, Sparklines group, then choose Line. The sparkline will display in cell F4. For the location range, click in cell F4 and press enter.
38. With cell F4 selects, on the Sparklines, Design Toolbar, in the Show group choose the checkbox next to Markers.
39. Apply the Dark Green, Sparkline Style Colorful #4 style (or similar). Styles are located on the Sparkline Design toolbar in the Style group. Choose the down arrow to view more styles.
40. With cell F4 selected, use the fill handle to fill the sparkline to cells F5:F7.
41. On the Page Layout Tab, Sheet Options Group, click the arrow to launch the Page Setup Dialog Box. Notice how it opens to the Sheet tab. Go to the Margins tab and click the checkbox to center the data and chart horizontally on the page.
42. With the Page Setup Dialog Box still open, go to the Header/Footer tab. Choose Custom Footer and insert the File Name in the left section of the footer. The file name will show in the Print Preview and also when the spreadsheet is printed. This is a **field**, so if the file name is changed, it will automatically update the footer with the new file name.
43. Close the Page Setup Dialog Box, and click File to go to Backstage View. Under Info, choose

Properties, and then Advanced Properties. Add the following Properties:

- Title: Excel Budget
  - Subject: Business computer Applications, COMP 1050
  - Author: Your First and Last Name
  - Keywords: Sums, Charts, Budget, Excel
44. Click the back arrow to exit backstage view. Click the Save shortcut button and ensure your file is saved in a safe location.
  45. Select the range A2:F5 and then press **Ctrl + F2**. This is the keyboard shortcut that displays **Print Preview**. If you do not have the shortcut key, click File to enter Backstage View, Print and view the Print Preview.
  46. Change the print settings option to **Print Selection** and notice how the Print Preview changes. Printing of this assignment is not required, but if you needed to print a copy, you would click Print.
  47. Exit Backstage view and Save your file.
  48. On the Formulas tab, in the Formulas Auditing group, Show the Formulas. This is a toggle button, so press it once to show the formulas. Press it again to remove show formulas. Notice how row 8 and column D display the formulas rather than the result when the show formulas is turned on. Turn show formulas off.
  49. On the Page Layout tab, in the Page Setup group, Change to Landscape orientation and Scale the data to fit on one page. To scale the data, choose the arrow in the page set up grouping to open the dialog box, you will find the scaling option on the page tab.
  50. Run spelling and grammar check from the Review tab using the Spelling button in the Proofing group, making any spelling corrections as necessary. Compare your file to the image below and make all necessary corrections.
  51. Submit as instructed by your instructor.



Solution\_Excel\_Practice1

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## EXCEL PRACTICE 2

Practice It



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**Complete the following Practice Activity and submit your completed project.**

For Excel Practice 2, we will use Excel to create an inventory of computer items donated to be refurbished and checked out by students. Key skills in this practice are entering data in a range, using arithmetic operators, quick analysis tool, and absolute and relative cell references,

1. Start Excel. Click **Blank Workbook**.
2. Select File, Save As, Browse, and then navigate to your Excel folder on your NSCC OneDrive or other location where you save your files. Name the **workbook** as  
Yourlastname\_Yourfirstname\_Excel\_Practice\_2.
3. In cell A1, type 'Inventory of Donated Computers and Devices' and press Enter.
4. Type 'Items to be Refurbished' in cell A2.
5. In cell B3 Type 'Quantity' and press **Tab**. The word Quantity is a **label**. Labels are used to describe and identify data in a spreadsheet.
6. In cell C3 type Retail Price and press Tab.
7. In cell D3 type Additional Cost and press Tab.
8. In cell E3 type Total Value and press Tab.
9. In cell F3 type Percent of Total Retail Value and press Enter.
10. In cell A4, type '2017 Dell Laptop' and then press Enter.
11. Apply the autofit column width to all cells. This is found in the cells grouping on the home tab, format options.
12. Select the range A5:A8 and type the following row titles, pressing Enter after each one:
  - 2012 Apple iPad
  - 2019 HP Laptop
  - 2020 MacBook Pro



- Total Value for All Products
13. Notice how when a range is selected, data can be quickly entered by using the Enter key within just that range of cells that is selected.
  14. Adjust column A to the width of 59.22 (420 pixels).
  15. Merge and Center the text in the range A1:F1 and then apply the Title style.
  16. Merge and Center the text in the range A2:F2 and then apply the Heading 2 style.
  17. Check Spelling for the entire worksheet, making necessary corrections. To check the spelling, go to the Review Tab, Proofing group, and choose Spelling. You can also use the shortcut key of F7.
  18. Select the range B4:D7.
  19. Pressing Enter after each entry with B4 as the starting “active” cell in the range, type the following:
    - 10
    - 30
    - 17
    - 7
  20. With cell C4 active, continue to type the following values, pressing Enter after each:

Retail Price	Additional Cost
250	82
200	61
540	120
1200	92

21. In cell E4, type =b4\*c4 and click the Enter button on the Formula Bar (the checkmark). Click in cell E4 and drag the fill handle down to cell E7. Note that the cell reference can be typed in uppercase or lower case when manually typing in a formula. The \* is an operator used to multiply two values. In this formula, we are taking the quantity and multiplying it by the retail price to give us the total value.
22. Select the range B4:B7 and apply the comma number style with zero decimals. The comma style is located on the Home Tab, Number Group, Comma. In the same location, click the **decrease decimal** button twice to remove all decimals.
23. Select the range E4:E7 and notice how at the bottom of your screen, the values for Average, Count, and Sum are displayed in Excel’s Status Bar. If you right click in this area, you can change the setting to modify what is displayed here.
24. If necessary, select the range E4:E7. Notice in the lower right hand corner of the selected range, the **Quick Analysis Tool** displays. Click and navigate to the “Totals” tab, click the first Sum button. The sum of the range E4:E7 should display in cell E8.
25. Select the range C4:E8 and apply the Accounting number format with zero decimals.
26. In cell E8, apply the Total style.
27. In cell F4, type = click cell E4 type / (the forward slash) and then click cell E8. The / is an operator used to divide two values.



28. Double-click the formula in cell F4 to display the **range finder**. Notice how your cell ranges in the formula are colour coded. Click Enter.
29. Select cell F4 and drag the fill handle on cell F4 down through cell F7.
30. In cell F5, point to the Error Checking button to display the ScreenTip. Notice the divide by zero error. This error means that you are trying to divide by zero, which cannot be done. The denominator is a blank cell with zero content.
31. Double-click the “E8” cell name in the formula in cell F4 up in the Formula Bar, and use the F4 Function key on the top row of your keyboard to make the formula **absolute** so that the new formula is E4/\$E\$8. Click Enter on the formula bar. Drag the fill handle in cell F4 down to cell F7. If your keyboard does not have the F4 Function key, you can manually type in the dollar signs. The dollar signs indicate an absolute reference. This means that the denominator will remain at E8, even when the fill handle is used to copy the formula down.
32. Double-click in cell F5 to show the resulting formula with an absolute reference applied. Notice how the cell E8 has dollar signs around the cell name.
33. Select the range F4:F7 and format as a percentage with two decimal places.
34. Click cell B5 and type 10 and notice how the other values change.
35. Select the **undo** button to reverse the last action.
36. Insert a new row above row 3. There are a couple of ways to do this:
  - Click on the 3 row header to select it. Right click and select Insert.
  - Click on the 3 row header to select it. On the Home Tab, Cells group, select the arrow next to Insert and select Insert Cells.
37. In cell A3, type As of September 1. Merge and Center the text across the range A3:F3. Apply the Heading 3 Style.
38. Delete column D which contains the additional cost. There are a few ways to do this:
  - Select the D to select the entire column and hit the delete key on your keyboard (you may get a message saying a merged cell cannot be deleted).
  - Select the D to select the entire column, right click and choose Delete.
  - Select the D to select the entire column, on the Home Tab, Cells Group, choose the arrow next to Delete and choose Delete Sheet Columns. Notice how the entire column and the data is deleted and the columns are shifted. The Total Value should be the new column D.
39. Select columns B:E and set the column width to autofit. AutoFit Column Width is found on the Home Tab, Cells Group, and clicking the arrow next to Format, then choose Autofit Column Width.
40. Center the text in the range B5:B8. You may need to change the format to General if the text does not center (click the down arrow on the Number Format option in the Number group of the Home tab).
41. Apply Themed Cell Style “Light Blue, 20% – Accent 1” to cell A9.
42. On the Page Layout tab, Themes Group, change the theme color to Blue Warm.
43. On the Page Layout tab, Page Setup Group change the orientation to Landscape.
44. In Backstage view, show the advanced properties. Add the following:
  - Title: Excel Inventory

- Subject: Business Computer Applications, COMP 1050
- Author: Your First and Last Name
- Keywords: Absolute Reference, Formulas, Excel

45. Run a spelling and grammar check, compare your file to the image below and make all necessary corrections.
46. Submit as instructed by your instructor

	A	B	C	D	E	F
1	Inventory of Donated Computers and Devices					
2	Items to be Refurbished					
3	As of September 1					
4		Quantity	Retail Price	Total Value	Percent of Total Retail Value	
5	2017 Dell Laptop	10	\$ 250	\$ 2,500	9.59%	
6	2012 Apple iPad	30	\$ 200	\$ 6,000	23.01%	
7	2019 HP Laptop	17	\$ 540	\$ 9,180	35.20%	
8	2020 MacBook Pro	7	\$ 1,200	\$ 8,400	32.21%	
9	Total Value for all Products			\$ 26,080		
10						
11						
12						
13						
14						
15						




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## EXCEL PRACTICE 5

### Practice It



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**Complete the following Practice Activity and submit your completed project.**

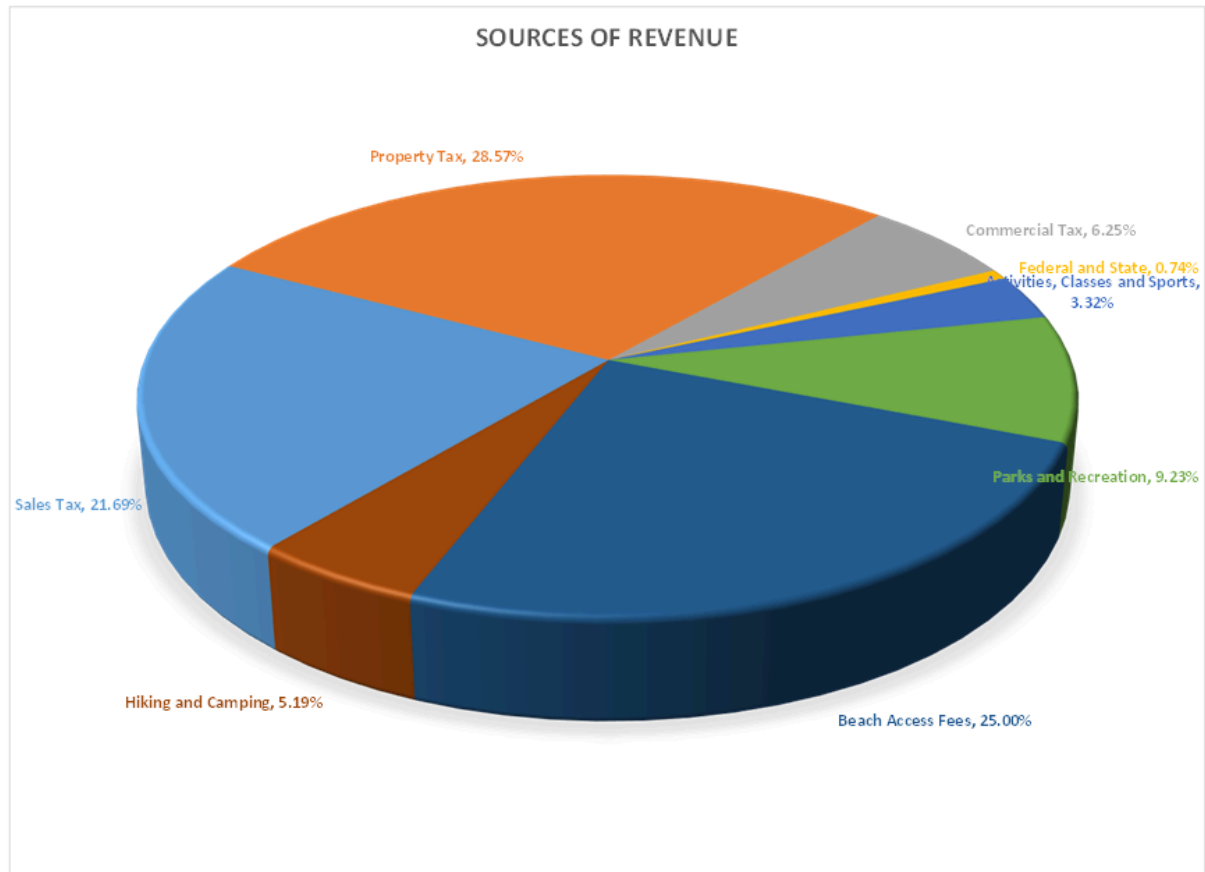
For Excel Practice 5, we will use Excel to manage projected Revenue for Paradise Beach City, where you have just been hired as a **Financial Analyst**. Key skills in this practice are creating and editing pie charts and What If Analysis.

1. On Brightspace in the “Excel Practice 5” sub-module download the Excel starter file provided.
2. With the Excel Practice 5 starter file open, Select File, Save As, Browse, and then navigate to your folder on your NSCC OneDrive or other location where you save your files. Name the **workbook** as Yourlastname\_Yourfirstname\_Excel\_Practice\_5.
3. To the left of column A, and above row 1, click in the square where the sideways triangle is to select the entire worksheet. AutoFit column width of all cell contents and then click anywhere in the worksheet to deselect it. Ensure you can view all of the cell contents and ### are no longer visible.
4. Select the range A1:C1, and merge and center. Apply cell style Title. If the text does not display all the way double-click on the line between the row headings 1 and 2 to Autofit the Row Height.
5. Select the range A2:C2, and merge and center. Apply cell style Heading 4.
6. Select the range A3:C3 and apply cell style, “Light Blue 20%, Accent1”. Center the headings. Ignore and spelling errors, we will run this later on.
7. In cell B12, clear the value in the cell if necessary. Use the AutoSum function to Sum the range B4:B11. You can use any of the methods previously learned to complete the AutoSum function. The formula in cell B12 should look like this =SUM(B4:B11)
8. Using the **Format Painter**, apply the format in cell A3 to A12. To use the Format Painter, select cell A3 so that it is the Active Cell. Click the Format Painter one time to activate it. The Format Painter is located on the Home Tab, in the Clipboard group. With the Format Painter active, click in cell A12.
9. In cell C4, type = click cell B4, type / and click cell B12. Make the cell reference B12 absolute in the formula. The formula in cell C4 should look like this = B4/\$B\$12. This formula will calculate the percentage of third quarter sales tax.
10. Select cell C4, and format it as a percentage with two decimal places, and center the

- percentage. Use the fill handle to copy the formula through cell C11.
11. Select the **non-adjacent** ranges A4:A11 and C4:C11. To select non-adjacent ranges, select the first range, next hold down the CTRL key, and then select the second range letting go of the left mouse button first and then the CTRL key.
  12. With the two ranges selected, insert a 3-D Pie Chart. This is located on the Insert Tab, Charts Group, then select the arrow next to Pie Charts and select 3-D Pie Chart.
  13. Move the chart to a new sheet named Projected Revenue. To create a **chart sheet**, ensure the chart is selected, on the Chart Tools Design Tab, in the Location Group, select Move Chart. In the Move Chart Dialog Box, select the New Sheet options and type in the name Projected Revenue. Notice how a new sheet is added to the Workbook with the name Projected Revenue.
  14. Change the **chart title** to Sources of Revenue. To change the chart title, go to the chart tools design tab, in the chart layouts group, select the arrow next to add chart element and select chart title, above the chart. Left-click on the Chart Title, and type Sources of Revenue pressing Enter when finished.
  15. With the chart title still selected, change the font size of the title to 36.
  16. Ensure the entire chart is selected, Using Chart Elements, deselect the Legend check box. Chart Elements is a plus button to the right of the chart.
  17. Display the Format **Data Labels** pane. This is on the Chart Tools Design tab, Chart Layout Group, select the arrow next to Add Chart Element, and choose Data Labels and then More Data Labels Options.
  18. Under Label Options, ensure the only checkboxes checked are Category Name and Percentage. Under Label Position, select, Best Fit. Click the X to close out the Format Data Labels pane.
  19. Right-click any of the selected data labels, select font, and apply Small Caps and change the font size to 11.
  20. Select the entire chart area. On the Chart Tools Design Tab, in the Chart Styles Group, select Style 8.
  21. Double click inside any pie slice to display the Format Data Series pane, click Series Options and ensure Series 1 is selected.
  22. For Angle of first slice, type 220 and press Enter.
  23. Under **Pie Explosion** type 10% and then press Enter. Notice how the slices of pie are separated. Select the Undo button one time, or type 0% for Pie Explosion. Click the X to close the Format Data Series Pane.
  24. On Sheet1, notice that Beach Access Fees are 8.05%. Click the Projected Revenue tab, and notice how this is represented on the Pie Chart.
  25. In cell B10 of Sheet1, type 3,500,000 and press Enter. Notice how the percentage automatically changed to 20.63%. Display the chart and notice how this change impacted the Pie Chart.
  26. Click cell B12 on Sheet1. On the Data tab, in the Forecast Group, click **What-If Analysis** and click **Goal Seek**. Goal seeking is the process of finding the correct input value when only the output is known.
  27. In the Goal Seek dialog box:
    - In the Set Cell box, B12 should be displayed.
    - In the To value box, type 14000000

- In the By changing cell box, click cell B4.
28. Close out of Goal Seek by selecting OK. Double check that cell B12 is set as the Currency number format with two decimal places.
  29. On the Page Layout Tab, launch the Page Setup Dialog Box and apply the following:
    - Center the worksheet Horizontally on the page.
    - Insert the File Name in the left footer.
  30. Rename Sheet1 to Data by double clicking on the “Sheet 1” tab.
  31. Group All Sheets.
  32. Press Ctrl + F2 to display the Print Preview. Examine both pages of the workbook. Point out the use of the keyboard shortcut. Show the footer in both sheets.
  33. In Backstage view, show the advanced properties. Add the following:
    - Title: Paradise Beach City Analysis
    - Subject: Business Computer Applications, COMP 1050
    - Author: Your First and Last Name
    - Keywords (Tags): Pie Charts, What-If Analysis, Goal Seek
    - If necessary, change the Inventory Sheet to Landscape Orientation.
  34. Run spelling and grammar check, compare your file to the image below and make all necessary corrections.
  35. Submit as instructed by your instructor.

Paradise Beach City		
Projected 3rd Quarter Income		
Revenue	Quarter Total	Percentage
Sales Tax	\$3,037,000.00	21.69%
Property Tax	4,000,000.00	28.57%
Commercial Tax	875,000.00	6.25%
Federal and State	104,000.00	0.74%
Activities, Classes and Sports	465,000.00	3.32%
Parks and Recreation	1,292,000.00	9.23%
Beach Access Fees	3,500,000	25.00%
Hiking and Camping	727,000.00	5.19%
Total Income from Fees	\$14,000,000.00	



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## CHAPTER 5: GLOSSARY



**Definition of terms used in this chapter:**

3D map	a type of map that is three dimensional and appears to have all three spatial dimensions including length, width, and depth
Absolute	a cell reference that refers to cells by their fixed position in a worksheet; an absolute cell reference remains the same when the formula is copied and is indicated by the \$ sign
Accounting Number Format	an Excel number format that applies a thousand comma separator where appropriate, inserts a fixed U.S. dollar sign aligned at the left edge of the cell, two decimal places and leaves a small amount of space at the right edge of the cell to accommodate parenthesis for negative numbers
Active cell	the cell surrounded by a black border that is ready to have content typed into it or perform a command
Auto fill	an Excel feature that generates and extends values into adjacent cells based on the values of the selected cells
Average	an Excel function that adds a group of values and then divides the result by the number of values in the group
Blank workbook	a file that data has not been entered into it yet and contains one or more worksheets
Cell content	anything typed into a cell
Cell styles	a defined set of formatting characteristics such as font, font size, font color, cell borders, and cell shading
Chart editor	provides options to edit and customize a chart in Google Sheets
Chart sheet	a workbook sheet that contains only a chart
Chart title	a label that describes the chart purpose
Clear all	when selected all formats and comments that are contained in the selected cells will be cleared
Clear contents	when selected clears only the contents in the selected cells while leaving any formats and comments in place
Columns	a vertical group of cells in a spreadsheet, indicated by letters
Comma Number Style	an Excel number format that inserts a thousand comma separators when needed with two decimal places, and leaves a space to the right to accommodate parenthesis for negative numbers
Constant value	a set value that does not change and is directly typed into a cell. There are two types: text and number values
COUNTIF	a statistical Excel function that counts the number of cells within a range that meet the given condition and has two arguments – the range of cells to check and the criteria
Ctrl + F2	a keyboard shortcut that displays the print preview
Data analyst	an IT professional whose responsibilities include inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making
Data labels	a text that describes and identifies data in a chart
Decrease decimal	for numbers already entered in a worksheet, you can increase or decrease the number of decimal places displayed by using the toolbar buttons
F7	a function key that runs spelling and grammar check when pressed
Fill handle	the small square in the lower right hand corner of a selected cell

Financial analyst	a professional career, undertaking financial analysis for external or internal clients as a core feature of the job
Flash fill	recognizes a pattern in your data and then automatically fills in values when you enter an example of the desired output; can be used to split data from two or more cells or to combine data from two cells
Formula	an equation that performs a mathematical calculation on values in a worksheet
Formula bar	an element in the Excel window that displays the value or formula contained in the active cell, you can edit and enter formulas here
Function	a predefined formula
Function arguments	the values that an Excel function uses to perform calculations or operations
Goal seek	a what-if analysis that finds the input needed in one cell to arrive at the desired result in another cell
Keyboard shortcut	a key or combination of keys providing quick access to a particular function
Label	descriptive words that explain data in a spreadsheet
MAX	an Excel function that determines the largest value in a selected range of values
MEDIAN	an Excel function that finds the middle value that has as many values above it in the group as is below it
Merge and Center	a command that joins selected cells in an Excel spreadsheet into one larger cell and centers the contents of the merged cell
MIN	an Excel function that determines the smallest value in a selected range of values
Multiple operators	a type of excel formula that contains more than one operator; mathematical order of operations is followed
Name box	an element of the Excel window that displays the name of the selected cell, table, chart, or object
Non-adjacent	cells that are not touching one another; to select non-adjacent rows or columns, hold Ctrl and select the row or column numbers
NOW Function	an Excel function that retrieves the date and time from your computer's calendar and clock and inserts the information into the selected cell
Number values	Constant values consisting of only numbers
Order of operations	the mathematical rules for performing multiple calculations within a formula
Pie explosion	when one slice or all of the slices of a pie chart are pulled away from each other to add emphasis
Print preview	a backstage view feature that displays on the screen what a hard (printed) copy would look like
Print selection	allows you to print a specific selection of cells
Quick Analysis Tool	a button that appears at the bottom right corner of the selected data and lets you instantly create different types of charts, including line and column charts, or add miniature graphs called sparklines
Range	two or more selected cells on a worksheet that are adjacent or nonadjacent
Range finder	an Excel feature that outlines cells in color to indicate which cells are used in a formula, useful for verifying which cells are reinforced in a formula

Rows	a horizontal group of cells in a spreadsheet, indicated with numbers
Sheet1	a new spreadsheet will be created with only one sheet, called Sheet1; additional sheets can be added as you need them
Sparklines	a tiny chart in the background of a cell that gives a visual trend summary alongside your data
Spreadsheet	also known as a worksheet, where data is entered for organization, analysis, and storage in tabular form in rows and columns of a grid and can be manipulated and used in calculations
SUM Function	a commonly used predefined formula that adds all of the numbers in a selected range
Summary sheet	a worksheet where totals from other worksheets are displayed and summarized
Tab	a key on your keyboard that allows you to move to the next cell in Excel
Text values	Constant values that are only text, and often times provide descriptions for Number values, may also be called a label
Theme	a predefined set of colors, fonts, lines, and fill effects that coordinate each other
Underlying formula	the formula entered in a cell and visible only on the Formula Bar
What-If Analysis	the process of changing the values in cells to see how those changes affect the outcome of formulas in a worksheet
Wildcard	special characters that can be used to take the place of characters in a formula; including ? (any one character) or * (zero or more characters)
Workbook	a file that contains one or more worksheets to help you organize data

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NSCC Edition	Intro to Microsoft Office	Personal E-mail Management
Chapter 1	Operating Systems	
Chapter 2		Personal E-mail Management
Chapter 3	Presentation Software	
Chapter 4	Word Processing	
Chapter 5	Spreadsheets	

### NSCC Changes

- Deleted chapter on databases and reordered content.
- Tagging and text coding changes to meet accessibility standards.
- Paradise Community College and South Puget Sound Community College references replaced with Nova Scotia Community College.
- Exercise: PowerPoint 4 replaced with new activity