



# ADA Compliant Word Docs

## Checklist

Here is a quick checklist for creating ADA compliant Word documents. You can click on each one for a more detailed description.

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## Headers

Headers are the most important part of a document's accessibility. While they are useful to sighted users, they are essential for those who use assistive technology. Assistive technology users will use headers as a table of contents. It will also allow users to jump around the document easily, via the navigation pane. While most users can easily skim a document, headers give that ability to those using assistive technology.

### Example of Heading Levels:

To give you a better idea of how headers should be set up, take a look at the image below. What you see is a table of contents taken from a book. I have assigned each listing a heading. Heading 1 will be the title of your document (this should be your only heading 1 in the document). Heading 2 will be the bulk of your primary headings. Heading 3 will be assigned to secondary headings, those that belong under your heading 2s. In more technical documents, you may also have to use headings 4, 5, and 6.

Title of Science Book (**Heading 1**)

Executive Summary (**Heading 2**)

Introduction (**Heading 2**)

    Background (**Heading 3**)

        Population A (**Heading 4**)

        Population B (**Heading 4**)

    Health (**Heading 3**)

Materials (**Heading 2**)

Methods (**Heading 2**)

Results (**Heading 2**)

    Experiment 1 (**Heading 3**)

    Experiment 2 (**Heading 3**)

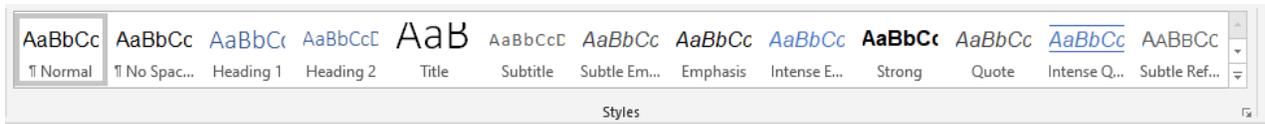
Discussion (**Heading 2**)

Conclusions (**Heading 2**)

References (**Heading 2**)

## Styles Section:

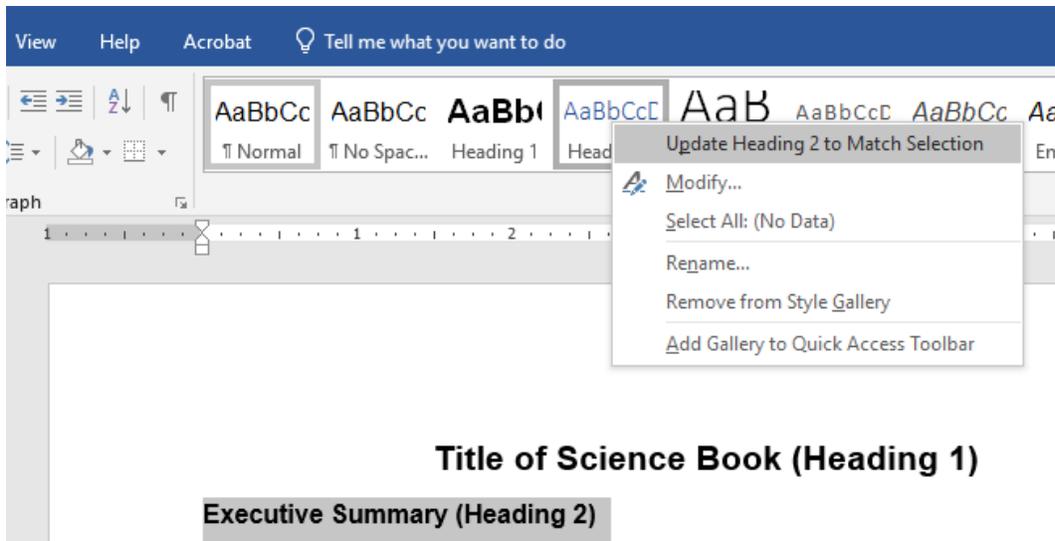
In Word, you can find headers in your Styles section.



## Updating to Match Selection Style:

The first time you use a heading, you will want to update it to match your font selection. For this example, we will be assigning a heading 2. To do this, highlight your heading text and then right click the heading 2 choice in your styles tab. From the menu that appears, select “Update heading 2 to match selection.” This will make it so that your heading 2 will keep the exact same font, size, alignment and any other settings that you had attached to the highlighted text. Keep in mind that once you update, this will change ALL heading 2s in your document to match the style of the highlighted selection. If you want some heading 2s centered and some left aligned, you may have to manually change those depending on which heading style you chose to update.

Note: Heading 3, 4, etc... normally do not appear in the styles section until you have assigned a heading 1 and 2.

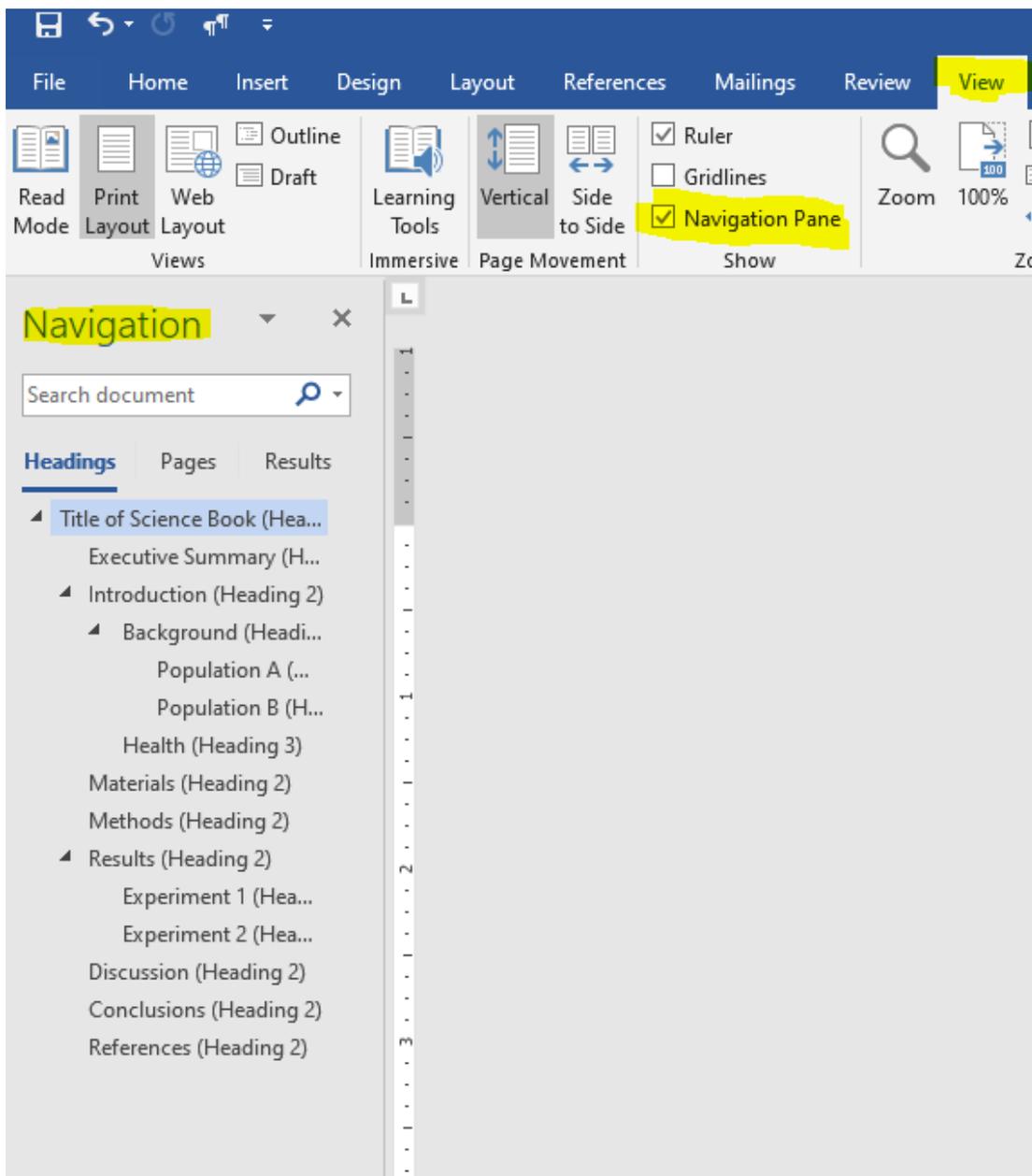


Once you have updated headings to your style choice, you can now highlight your next heading text and click your heading level of choice in the styles tab.

## Navigation Pane:

Once you have all your headers assigned in your document, you can use the Navigation Pane to check if your headers are present and correctly nested. To access the navigation pane, click “View” on the tool bar and then click the box next to “Navigation Pane.” The pane will pop up in a window on your left. You can see all of your selected headings and the nesting for each one. You can click on these headings and it will take you to where it is in the document.

**\*Note:** If you see any blanks in the navigation list, it means that you have a blank line assigned with a heading in your document. Be sure to remove that header by going to the blank line in the document and clicking “normal” in the styles tab.



## Alternate Text for Images

When thinking about good design, visual elements are always a huge factor. This can cause issues for those using assistive technology. This is where alternate text, also known as “alt text,” comes into play. Alt text is used as a detailed description of an image. You want to describe the image as if you were explaining it to a blind person, pointing out the important and relevant parts of the image. If you are using an image for decoration purpose only and the image has no relevant information, you can use the “Mark as Decorative” option. **\*ALL images should have some form of alt text or is marked as decoration.**

### Assign Alt Text:

To assign alt text to an image, right click on the image. In the menu that appears, click on “Edit alt text.” Another option is to click on the image, then select the format tab in the tool bar and choose “alt text.”

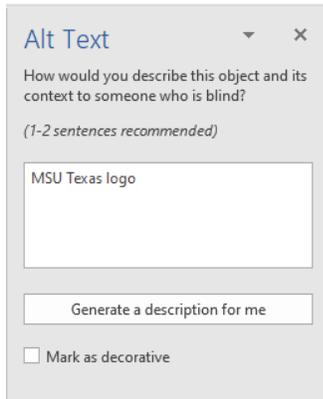
The image shows a Microsoft Word document with a right-click context menu open over an image of the MSU Texas logo. The menu includes options like Cut, Copy, Paste Options, Edit Picture, Save as Picture..., Change Picture, Group, Bring to Front, Send to Back, Link, Insert Caption..., Wrap Text, Edit Alt Text..., Size and Position..., and Format Picture... The 'Edit Alt Text...' option is highlighted. To the left of the menu, there is a yellow highlighted note: 'Note: You can use the template to find examples of formatting with...'. Below the menu, there is contact information for an instructor: 'Instructor: Enter', 'Office: Enter', 'Office hours: Enter', 'Office phone: Enter', 'Cell Phone: Enter', 'Twitter: Enter', and 'E-mail: Enter'. Below the menu, the Microsoft Word ribbon is visible, with the 'Format' tab selected. The 'Alt Text' button in the 'Picture' group is highlighted in yellow. A tooltip for the 'Alt Text' button reads: 'Display the Alt Text Pane. Create text descriptions of objects for screen readers.'

Table 1: Points allocated to each assignment – You can but will need to use table Tool if you add more column any blanks in table. Follow instructions listed under Cc

| Assignments                 | Points |
|-----------------------------|--------|
| Quizzes (10 at 35 pts each) | 350    |

## Alt Text Panel:

A panel will appear on the right side of your Word document. This is where you will enter your alt text or choose the mark as decorative option. There is also the option “Generate a description for me.” I have not had any luck using this feature. If you decide to use this, which I do not recommend, be sure to edit any description to fully and correctly match your image.



Reminder: Mark as decorative is **\*ONLY** for images that convey no information; Images that are only used for a design purpose. If the image has any information that you want the students to have, it **\*MUST** have detailed alt text.

## **Descriptive Hyperlinks**

Those that use assistive technology have the option to view a full list of links available in a document. Using descriptive links is important to the user knows where the link is taking them and why. You want to avoid putting in a full URL because a screen reader will read out the “h t t p : / /” and that can be frustrating to the user. Descriptive hyperlinks tell the user what the link is about while also being short and to the point! **\*ALL links must be descriptive hyperlinks with the exception of links in the resource section or emails.**

### Example Hyperlink

For this example, I want to insert a link to our faculty resource page on the MSUTexas website.

Instead of putting in the URL, which looks like this:

<https://msutexas.edu/distance/online-teaching-aids.php>

I am going to put it as a descriptive hyperlink, which looks like this:

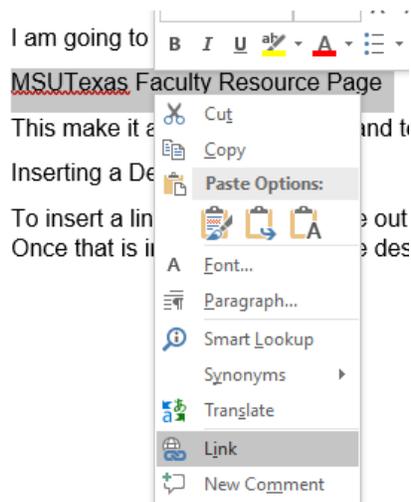
[MSUTexas Faculty Resource Page](#)

This makes it a much shorter link and tells me exactly where I am going.

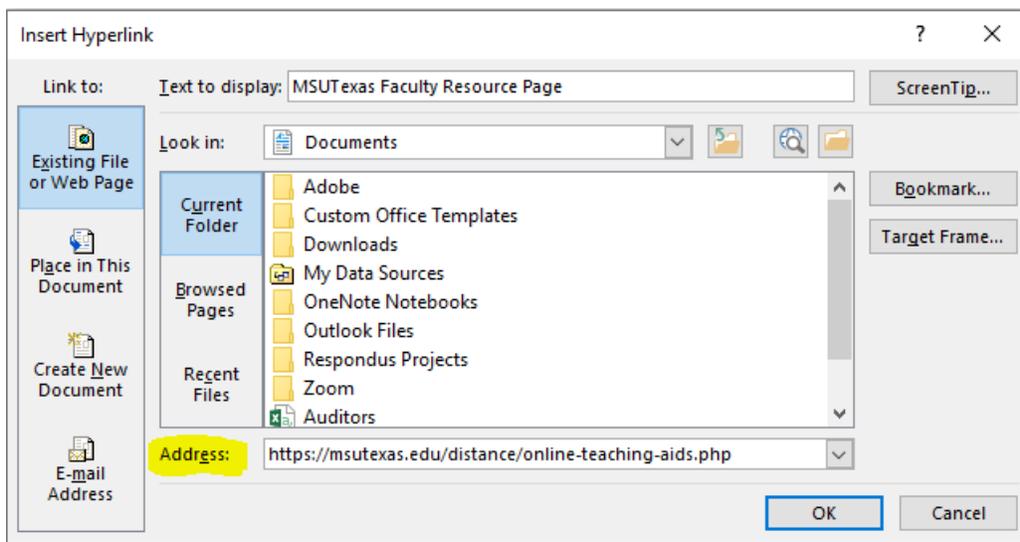
Note: Do not use general phrases like “Click here” or “Read More” or “Learn More” as your descriptive link. You want the user to know where the link takes them based on the description you give it.

### Inserting a Descriptive Hyperlink

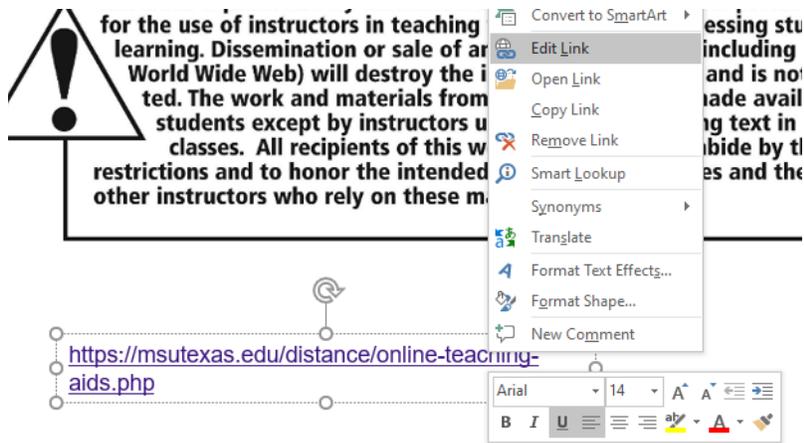
To insert a link, you’ll want to type out the description that you want the link attached to. Once that is in place, highlight the description and then right click and choose “link.”



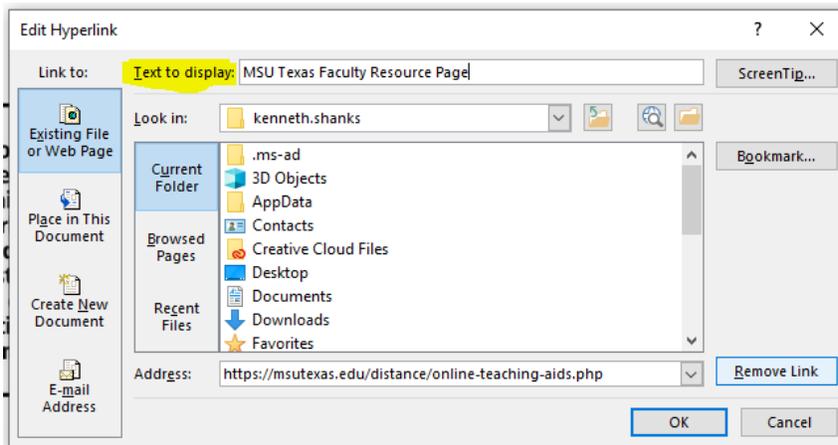
A new window will appear. Paste your link into the “address” section and then press okay. Your text will now be a link, appear blue, and underlined.



If you already have the hyperlink in the Word document, you can change the text that it displayed. Right click your hyperlink and choose “Edit Hyperlink.”



A new window will appear. In the Text to display box, put in the description for the hyperlink and press okay.



### Additional Link Rules

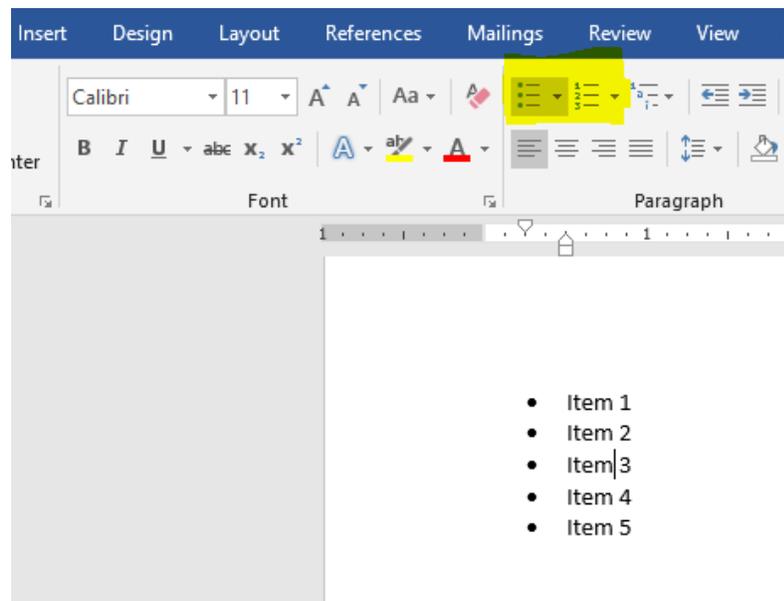
- Website and email links must lead to the correct, active web destination or address. Links need to be corrected if they lead to a dead website, a 404 error, or a return to sender email address.
- All links must be visually distinguishable from the surrounding text. The normal blue font with underline works for this criterion.

## Lists

Lists are extremely helpful for those using assistive technology. It gives the user cues about the beginning of the list and the movement when going from one list item to another. Lists are also extremely valuable for visual learners and great for overall design.

### List Styles

To create a list, highlight the text of choice and choose one of the two list style options under the Paragraph section on your toolbar. Once the list is created, you can verify that it is a list by clicking anywhere inside of the list and you will see that one of the list styles will be grayed. This means that the list is utilizing that style.



## Tables

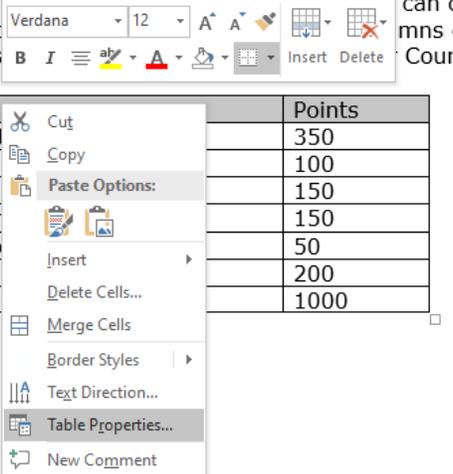
Tables can be extremely challenging to assistive technology users if they are not set up correctly. **\*You want to be as simple as possible when creating a table.** Tables need to include a header row, set up so that the row does not break across pages, have a quick alt text, have no merged cells, and have no blank cells unless the table is being used for a student to fill the information in themselves.

## Header Row

To assign a header row, highlight the row that includes your headings. Right click the row and choose “Table Properties.”

Table 1: Points but will need to any blanks in t

| Assignments    | Points |
|----------------|--------|
| Quizzes (10 at | 350    |
| Homework       | 100    |
| Discussions    | 150    |
| Midterm Exam   | 150    |
| Reflection Pap | 50     |
| Final Exam     | 200    |
| Total Points   | 1000   |



In the Table Properties window, go to the row tab. Put a checkmark next to “Repeat as header row at the top of each page” then press OK.

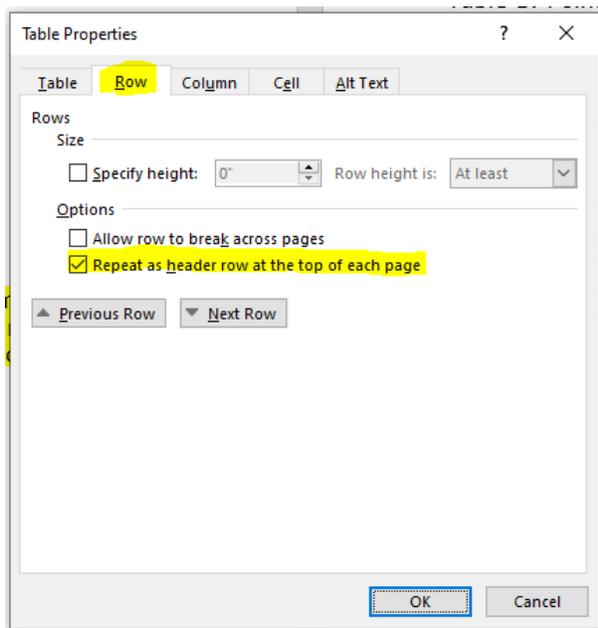


Table Properties

Table **Row** Column Cell Alt Text

Rows

Size

Specify height: 0" Row height is: At least

Options

Allow row to break across pages

Repeat as header row at the top of each page

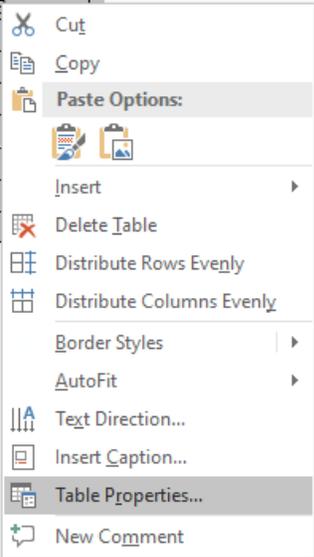
Previous Row Next Row

OK Cancel

## Row Does Not Break Across Page and Alt Text

To make sure that rows do not break across pages, highlight your entire table, right click it and select “Table Properties.”

| Assignments                 | Points |
|-----------------------------|--------|
| Quizzes (10 at 35 pts each) | 350    |
| Homework                    | 100    |
| Discussions                 | 150    |
| Midterm Exam                | 150    |
| Reflection Papers           | 50     |
| Final Exam                  | 200    |
| Total Points                | 1000   |



Under the row tab, make sure the box next to “Allow row to break across pages” is blank.

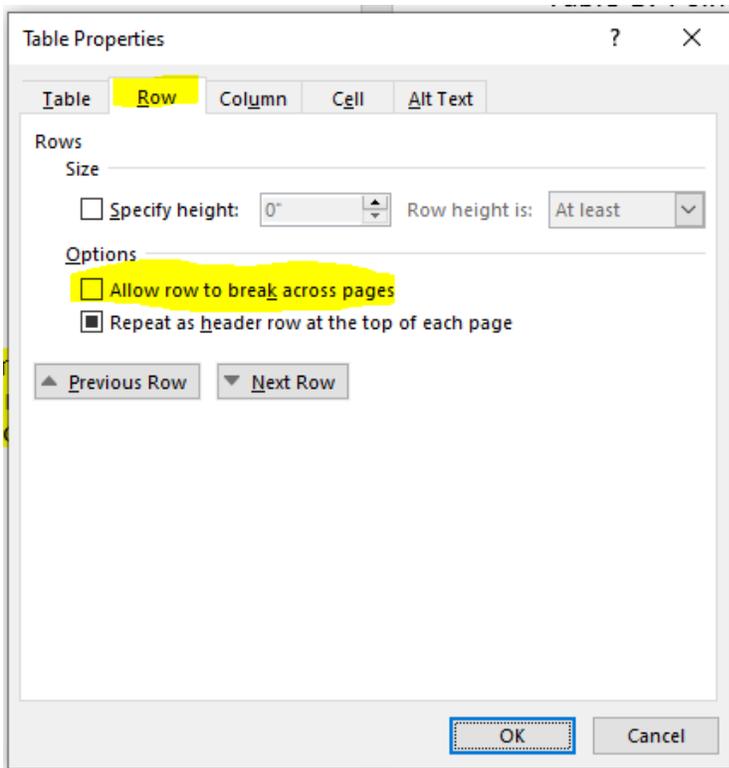


Table Properties

Table **Row** Column Cell Alt Text

Rows

Size

Specify height: 0" Row height is: At least

Options

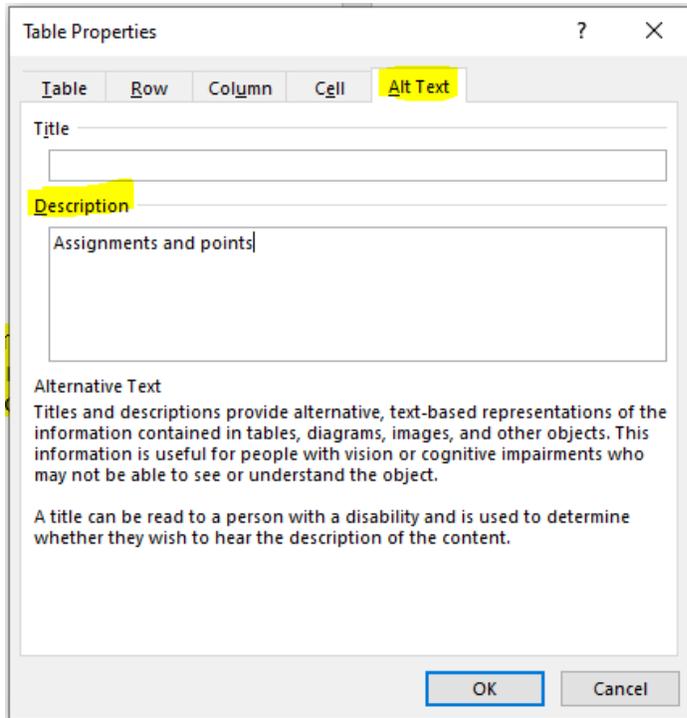
Allow row to break across pages

Repeat as header row at the top of each page

Previous Row Next Row

OK Cancel

Before you press OK, we can take this time to enter a quick alt text. Go to the Alt Text tab and under “description” put in a short alt text about what the table is for. For example, if you are using a table for your course schedule, the alt text can just say “Course schedule.” This description does not have to be very detailed.



### Merged or Blank Cells

Merged cells can cause issues for screen readers when it comes to lining up with the header row. Below is an example of a merged cell. **\*Do not use merged cells!**

| Week or Module | Activities/Assignments/Exams                            | Due Date                 |
|----------------|---|--------------------------|
| Week 1         | Detailed instructions on the Activities and Assignments | Clearly posted Due Dates |
| Week 2         | Detailed instructions on the Activities and Assignments | Clearly posted Due Dates |
| THANKSGIVING   |   |                          |
| Week 4         | Detailed instructions on the Activities and Assignments | Clearly posted Due Dates |

Blank cells also cause issues for screen readers. A blank cell can cause confusion and lead to the user losing their place inside of the table. The user would then have to repeat the table to understand why there was a blank space. Best practice for a blank cell is to put either “N/A” or another type of signifier that tells the screen reader that there is nothing in that cell. You can use blank cells if you are creating a table that the student has to fill in information themselves.

## Color Contrast

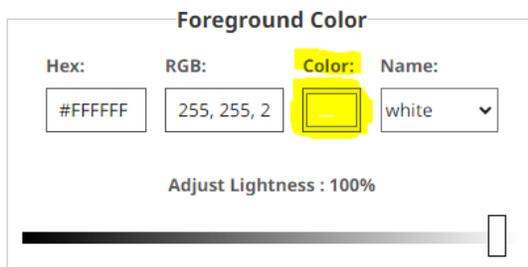
Color can be important to overall design but can cause issues for those with visual impairments or those who are colorblind. If you are using color, be sure to pick colors with high contrast. The rule to meet WCAG AA standards is a contrast of 4.5:1 for font below 18 points and 3:1 for font 18 points and above. **\*There are ways to check your contrast, which I will describe below, but if you want to avoid having to check each time then focus on having a light color font on a dark background or a dark color font on a light background. The more contrast, the better!**

### Checking Contrast

To check the contrast of a color, you will want to use [Deque's Color Contrast Analyzer](#).

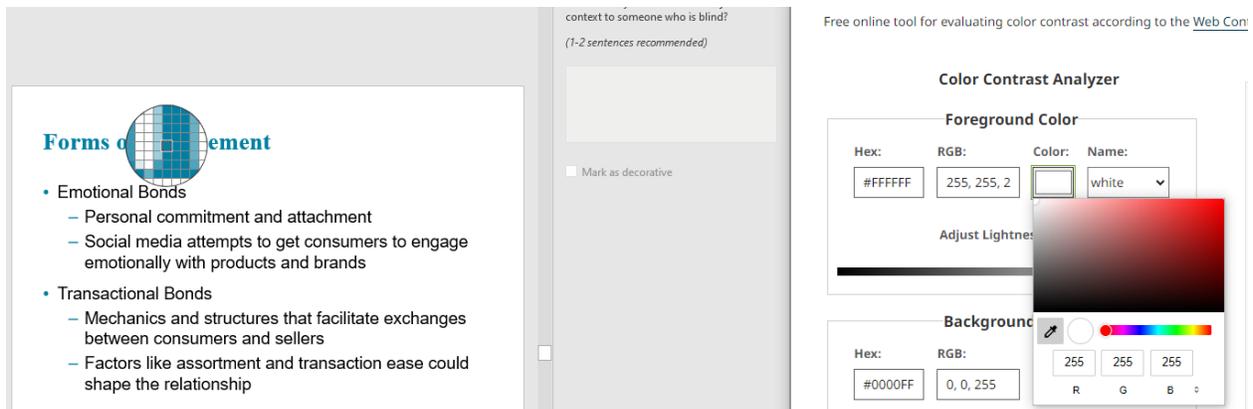
This website has three important areas: the foreground color, the background color, and the results.

To change the color of the foreground and background, click on the box below the words "Color."



The screenshot shows the 'Foreground Color' section of the Deque's Color Contrast Analyzer. It features four input fields: 'Hex' with the value '#FFFFFF', 'RGB' with the values '255, 255, 2', 'Color' with a yellow color swatch, and 'Name' with the value 'white'. Below these fields is a slider labeled 'Adjust Lightness : 100%'.

This will open a small window where you can pick your color. Click on the little dropper. This will allow you to use the dropper to select the color in your Word document. It will give you a magnifying circle that you use to hover over the color in your Word doc. You will want to select the darkest color when using the dropper. Repeat this for the background color.



The screenshot shows the Deque's Color Contrast Analyzer tool overlaid on a webpage. The webpage content includes a heading 'Forms of [redacted]ment' and a list of 'Emotional Bonds' and 'Transactional Bonds'. The tool's interface shows the 'Foreground Color' set to white (#FFFFFF) and the 'Background Color' set to black (#0000FF). A color picker is open over the background color, showing a gradient from red to black. The tool also displays a 'Mark as decorative' checkbox and a 'context to someone who is blind?' note.

Once you have selected both your foreground and background colors, you will see the results. Your goal is to have the ratio be equal to or higher than 4.5:1 if the font is below 18 points and 3:1 if the font is 18 points or above. In the example below, the color we used has a 4.6:1 ratio, which is compliant. Our goal is to meet AA standards. If your color meets AA but does not meet AAA, it is still compliant.

### Foreground Color

Hex:     RGB:     Color:     Name:

Adjust Lightness : 100%

### Background Color

Hex:     RGB:     Color:     Name:

Adjust Lightness : 50%

### Result

Small sample text.

Large sample text.

**Contrast Ratio = 4.60:1**

| WCAG Standard | Small Text | Large Text,<br>UI Components,<br>& Graphical Objects |
|---------------|------------|--|
| AA            | Pass       | Pass   |
| AAA           | FAIL       | Pass   |

## Emphasized Messages

If you are trying to portray an important message to your students using **Bold**, *Italic*, Underline, CAPS, **Highlight**, or **Color** screen readers will not pick these up. To help the screen reader know that you are giving out important information, put a \* in front of the message. So now it will be **\*Bold**, *\*Italic*, \*Underline, \*CAPS, **\*Highlight**, or **\*Color**. It is up to your discretion if the message is important enough to earn a \* or not.

Here are a couple examples of sentences:

- **\*ALL** homework is due by the end of Friday.
  - This sentence seems very important, it should get a \* in front of **ALL** as it is underlined and in caps.
- There will be **SOME** people who do not want to wake up that early.
  - This sentence is not very important and the word **SOME**, even though it is in caps and bold, was used as a minor emphasis so it does not need a \*.
- Messages in color should almost always have a \* with it unless the color is the main font of the PowerPoint or document. For example, if I put one sentence in red but all my other font is black then it needs a \*. If my entire Word font is in a dark blue, there is no emphasis to be had so it does not need a \*.

## Math Equations

Math can be extremely difficult for screen reader users, especially if the document is not set up with them in mind. There are two options for providing ADA compliant math problems.

### Option 1: Using images of math equations.

If you choose this option you have to give the images extremely detailed alt text. This option would work best for simple equations. Often times you will want to convert symbols into words for the alt text.

For example: instead of using  $3 \times 2$  in the alt text, you say 3 multiplied by 2.

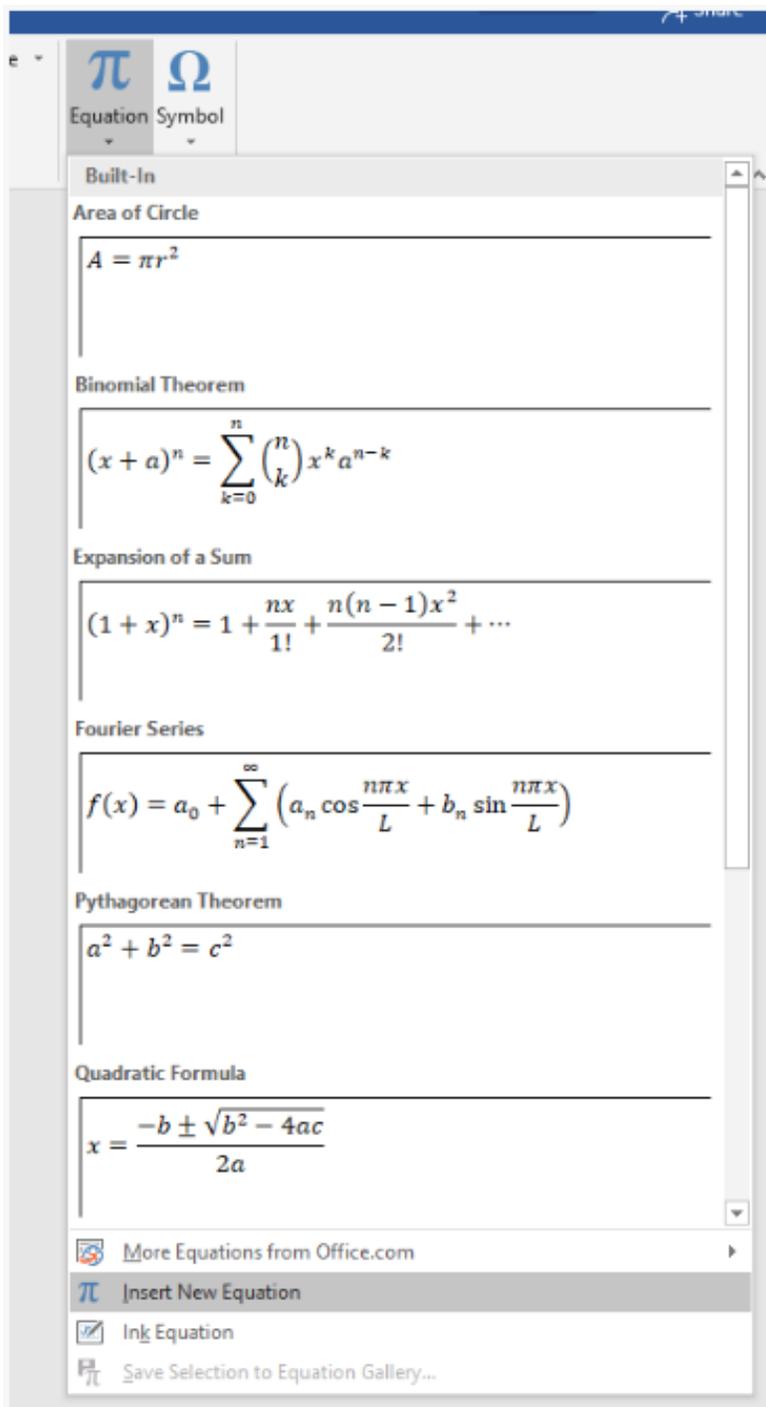
**\*Note:** All images of math problems must have \*detailed alt text.

### Option 2: Using the built in Word math equation tools.

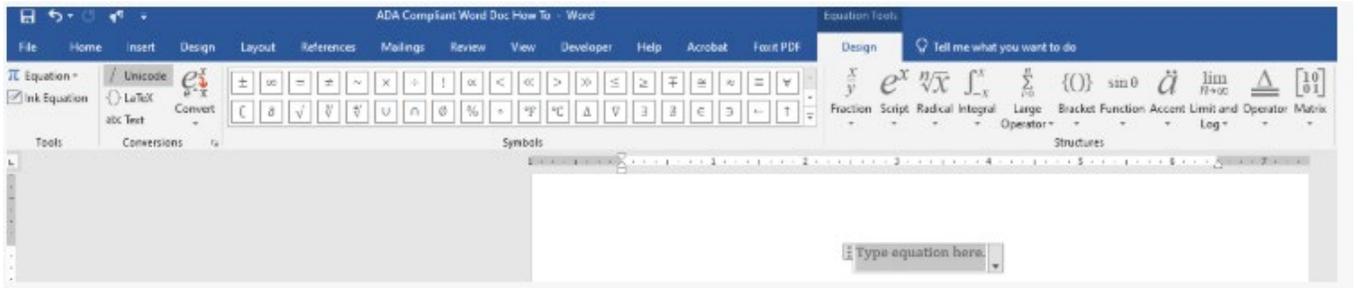
This option is best for complex equations. You can find the equation tool under the Insert tab. They will be on the far right of this tool bar.



You can choose a built-in equation or start a new one via the "Insert New Equation."



Once you choose an equation you can click anywhere inside the equation. Doing this will provide you with a new toolbar that has many more math related options.



The perk of using this option is that Word will have built-in alt text for math equations used via the equation tool.

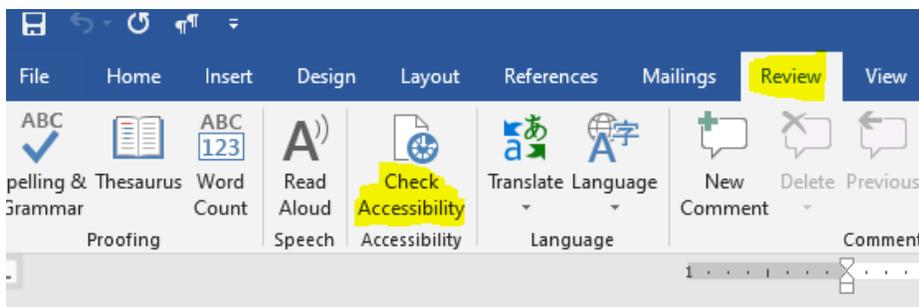
## MathML

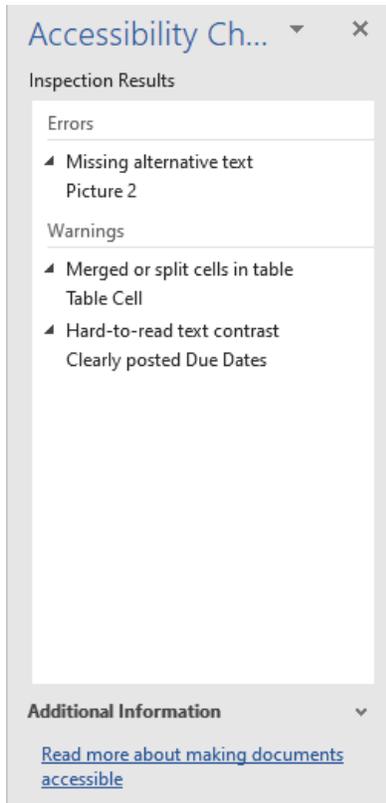
You could look into [MathML](#), which is a mathematical markup language for describing notation. The website provided will give you more information and includes tutorials and guides. MathML would be a great tool to learn if you use math a lot in your online courses.

## Accessibility Checker

Word does have an accessibility checker but it is not very accurate when it comes to all the compliance requirements. **\*While I do recommend using it to see if you missed something, I would not rely solely on it.**

The accessibility checker can be found under the “Review” section on the top tool bar. After selecting “Check Accessibility” your results will show up in a window on the right side. Word will inform you of any mistakes it catches and give you information on how to correct it.





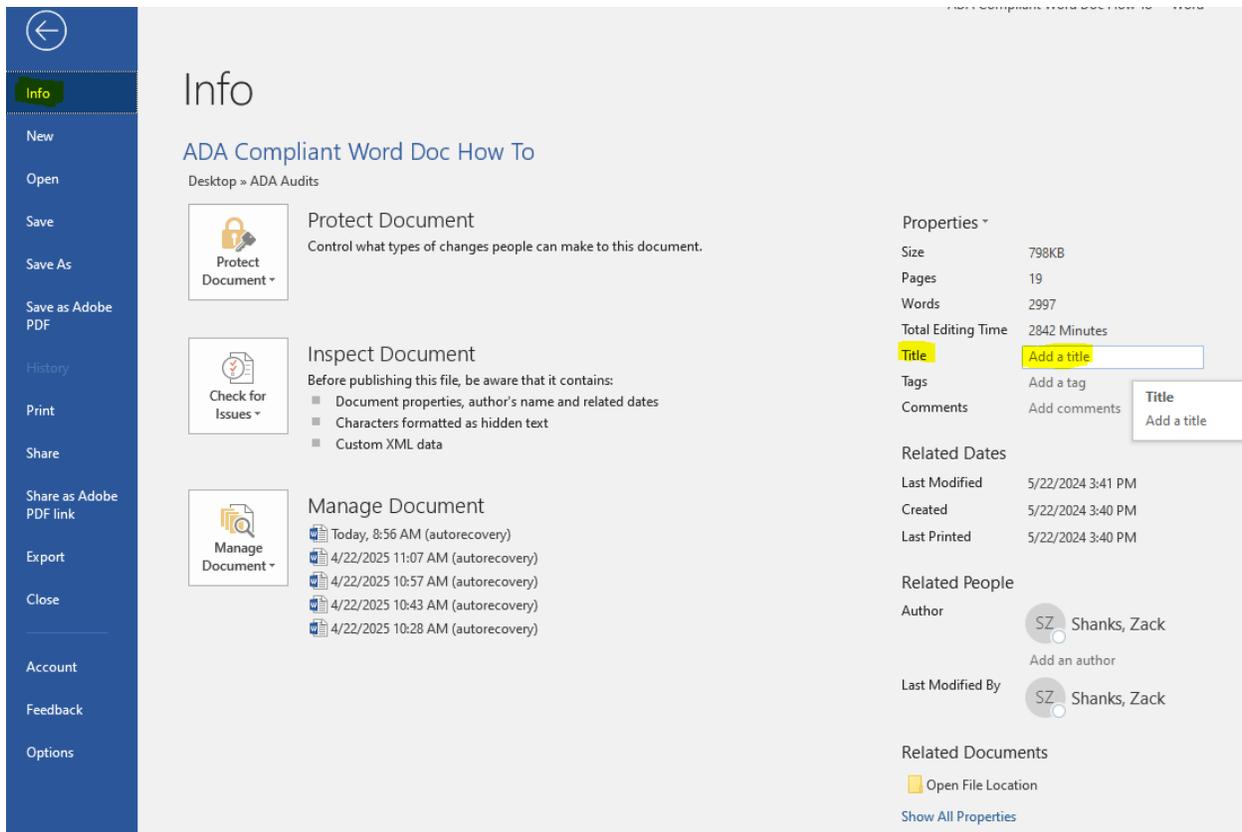
**\*Note:** It is a good habit to check the accessibility checker at least once before you finish your file.

## Document Title and Saving

### Document Title

Each file must have a descriptive title set in the properties. Document titles allow the user to know what the file is going to be about before they open it. If it is opened in a browser window, the name of that window will be taken from the document title. This will help the student recognize which browser window belongs to the file they just opened.

To insert a document title, you go to File on the toolbar. Once this opens, it should default to opening the Info tab. If not, click on the Info tab. You will insert a title on the right side of this screen, in the title box. Do not forget, this needs to be a descriptive title that lets the user know what the file is about based on the title you provide.



Here are some examples of good descriptive document titles for a course syllabus:

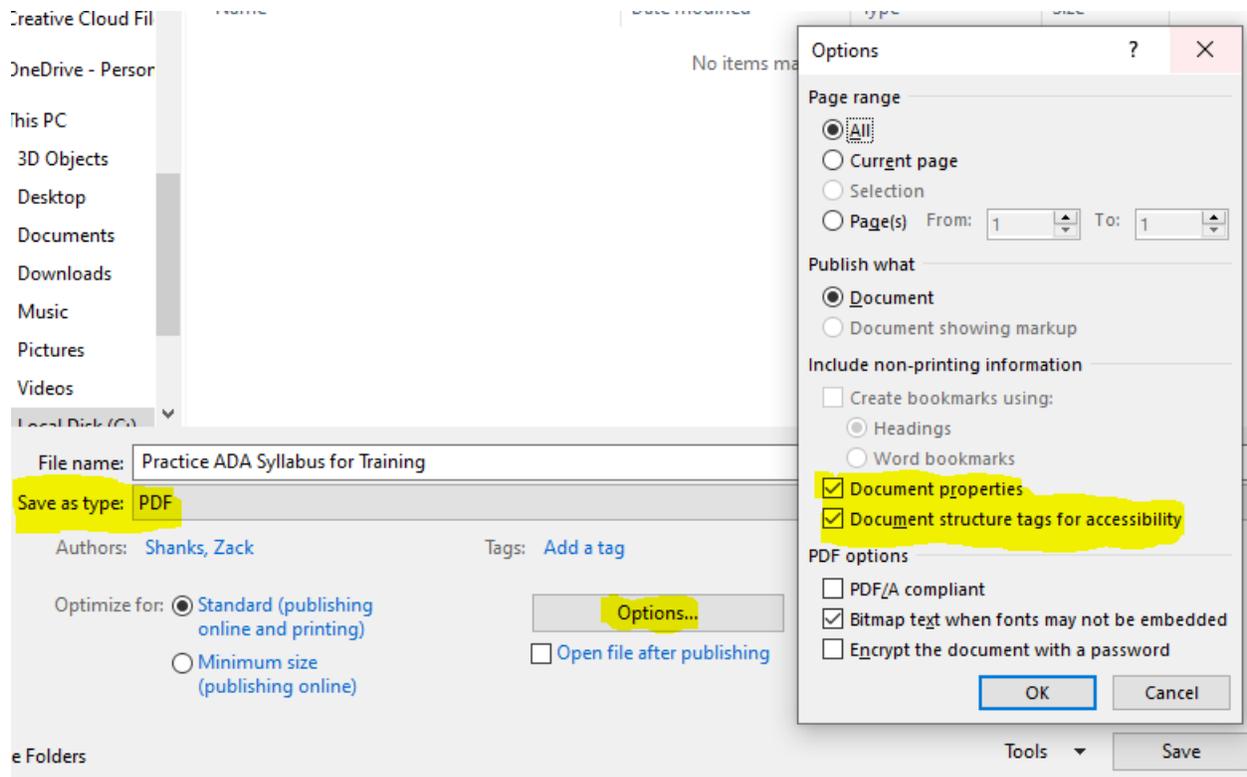
- KNES 9876 Syllabus Fall 2023
- Fall 2023 KNES 9876 Syllabus
- Shanks Syllabus Fall 2023 KNES 9876

**\*Note:** A descriptive file name will work to complete this criterion but the Ally checker in D2L only checks for document title. To avoid seeing that issue in Ally, use document title over descriptive file name, or use both!

### Saving Your File

Once you are finished with your Word document, I recommend saving it both as a Word document and as a PDF. Either file type can be posted to D2L but PDF is much more universal. To save, go to File -> Save As. Choose your location. First, I save it as a Word file, as it is easier to come back and make corrections. When you are ready to save it as a PDF, click the drop down next to “Save as type” and choose PDF. After selecting PDF, click into the options menu and verify that “Document properties” and “Document structure tags for accessibility” are checked. Hit save once finished. Saving this way will also save all compliance.

**\*Do NOT save it through the “Print” option as this does not save compliance.**



## Additional Assistance

If you need additional assistance, have ADA related questions, or would like to verify that you created an accessible Word document, send an email to [zack.shanks@msutexas.edu](mailto:zack.shanks@msutexas.edu).

*Created By:*  
*Office of Accessibility and Instructional Design*  
*Distance Education*  
*Midwestern State University*