



How To: ADA Compliant Word Documents

Criteria Checklist

Here is a quick checklist for creating ADA compliant Word documents. You can click on each criterion for a more detailed description. Your document must meet all of the criteria listed below to be fully ADA compliant.

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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**)

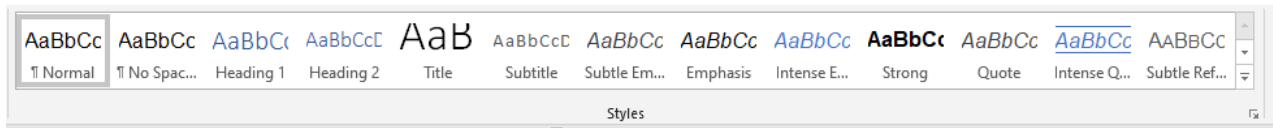


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Styles Section:

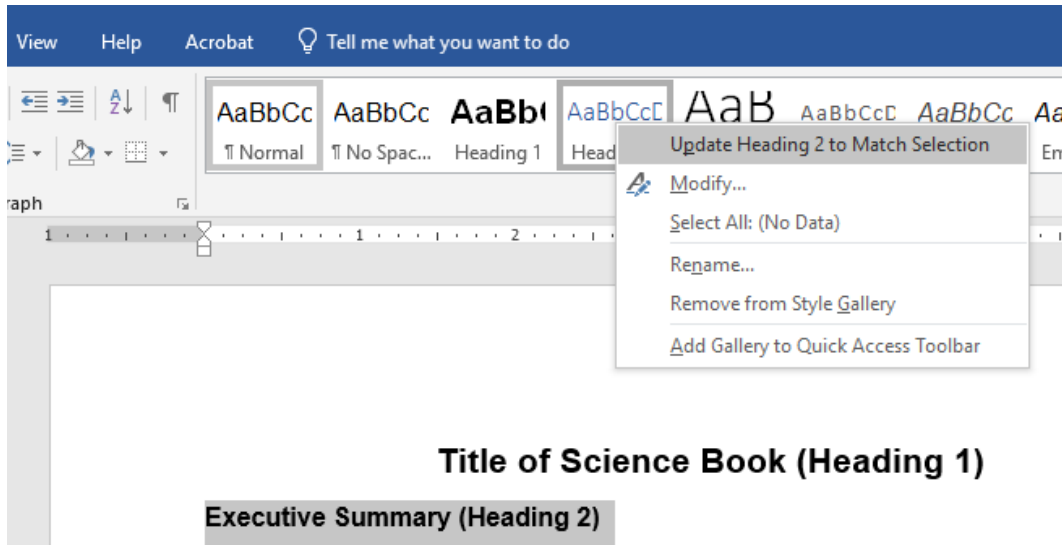
In Word, you can find headers in your Styles section.



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.

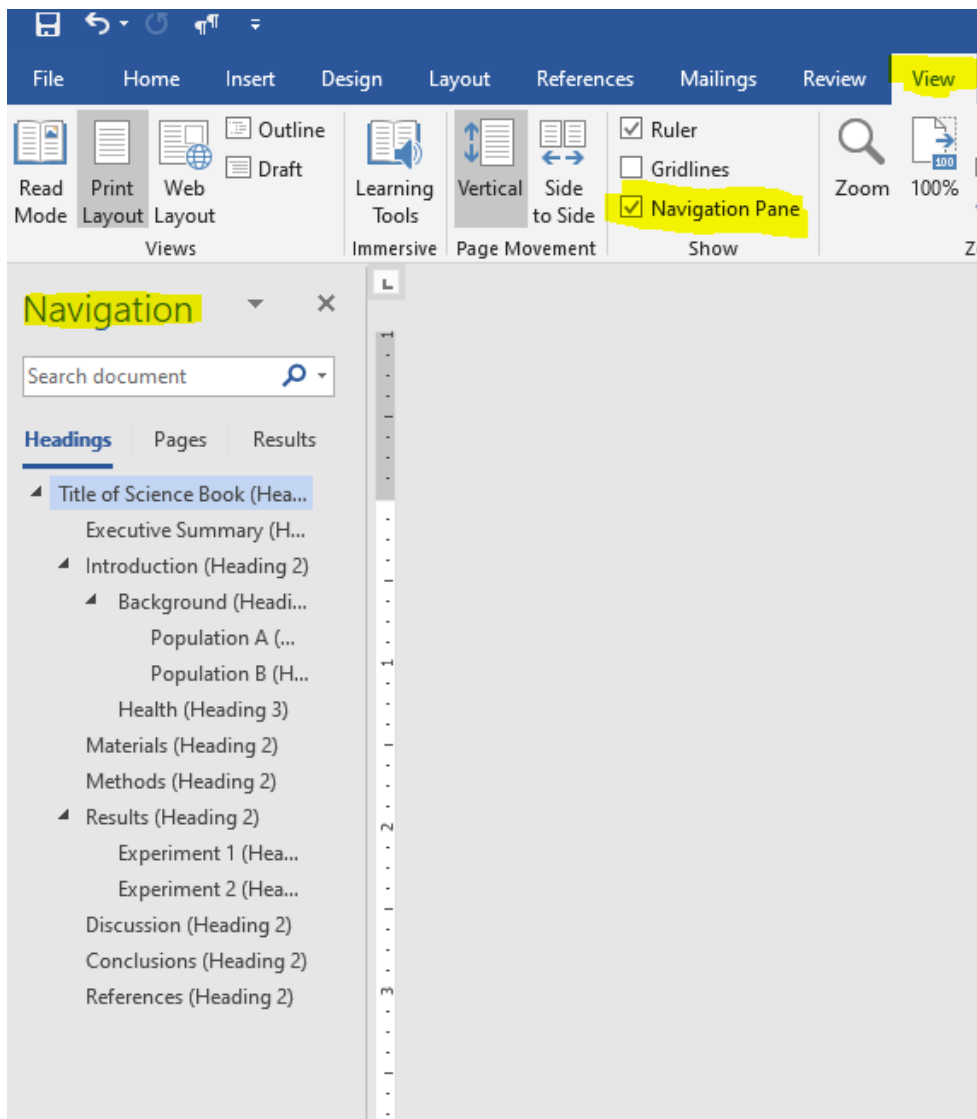


Once you have updated headings to your style choice, you can now highlight your next heading text and click your heading level of choice in the styles tab.

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 blank spots 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. **I recommend always checking Navigation Pane at least once before finishing your file.**

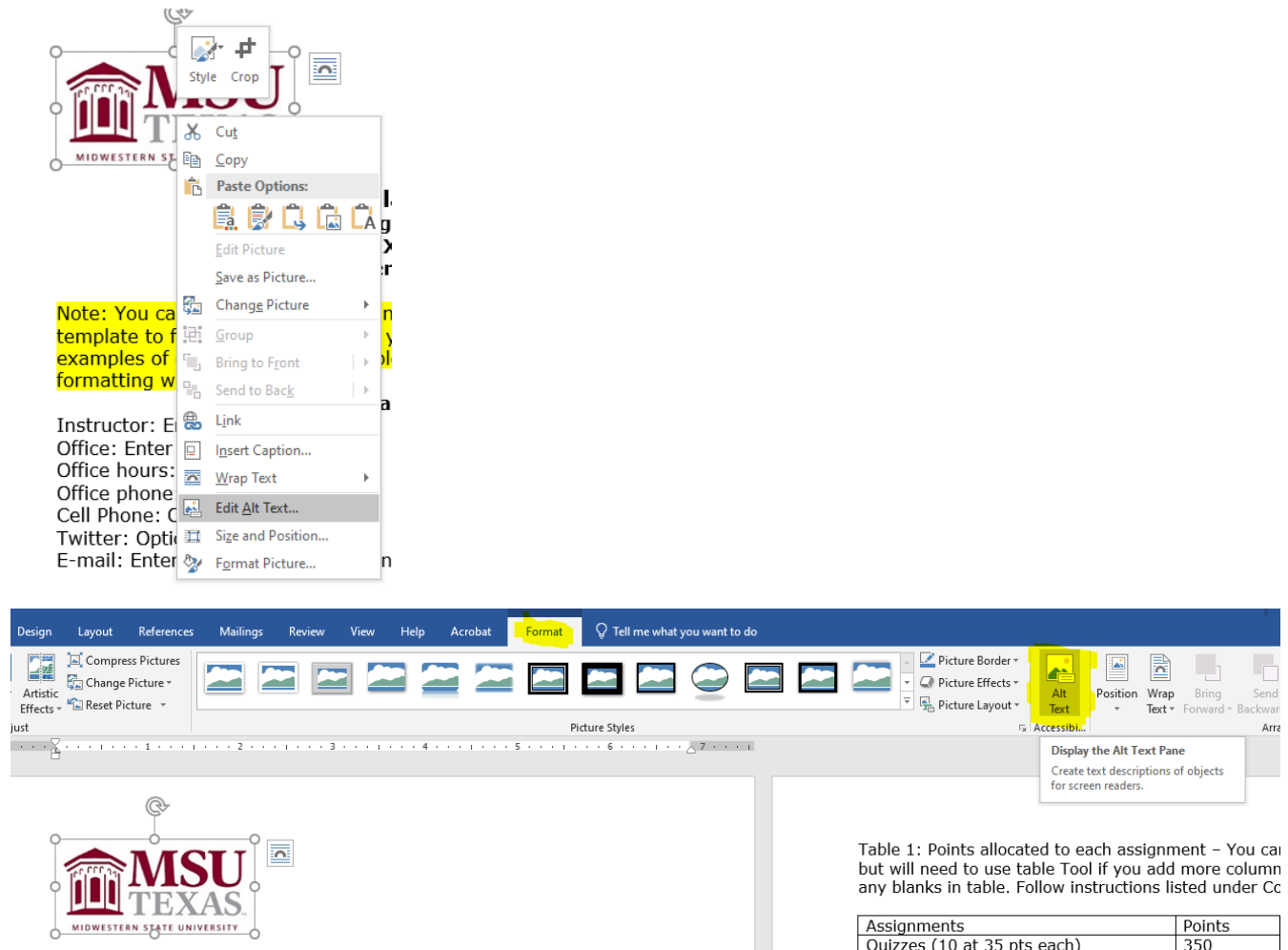


Alternate Text for Images

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” from the accessibility section.



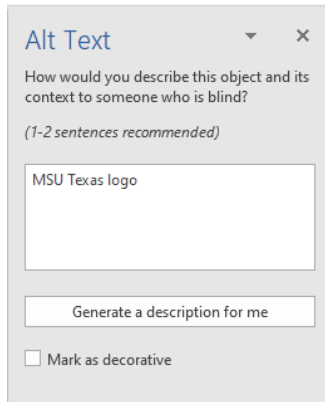
The image shows a screenshot of Microsoft Word. On the left, a context menu is open over an MSU logo image. The 'Edit Alt Text...' option is highlighted. A yellow note is overlaid on the left side of the menu: 'Note: You can use the template to find examples of formatting with'. Below the note, contact information for the instructor is listed. On the right, the 'Format' ribbon is visible, with the 'Accessibility' group expanded to show the 'Alt Text' button highlighted in yellow. A tooltip for 'Alt Text' 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 email links.**

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:



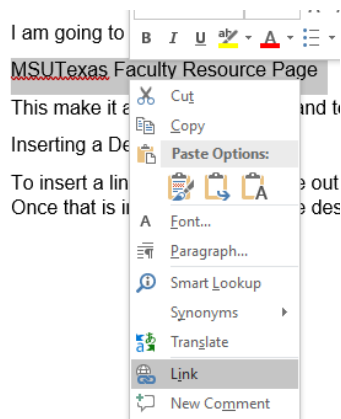
[MSUTexas Faculty Resource Page](#)

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

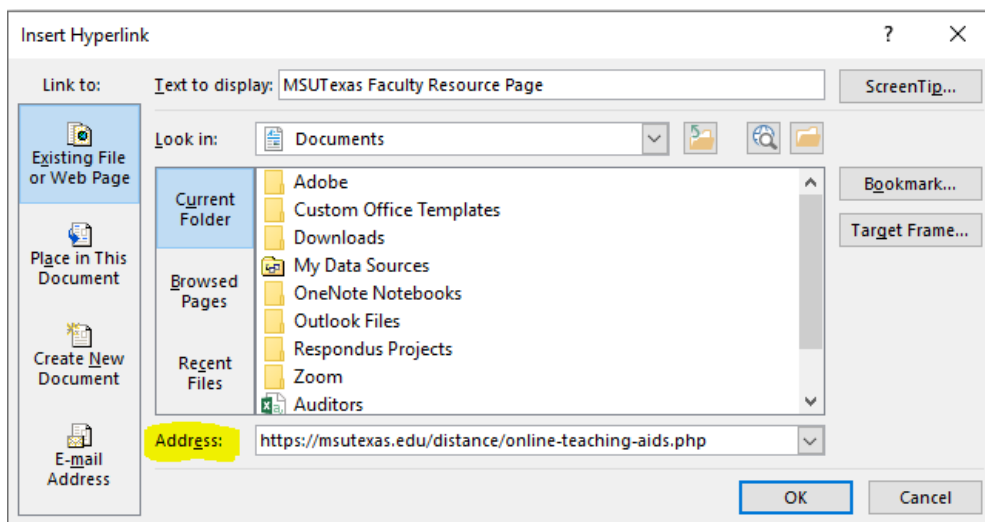
Note: Do not use general phrases like “Click here” or “Read More” or “Learn More” as your descriptive link. You want the user to know where the link takes them based on the description you give it.

Inserting a Descriptive Hyperlink

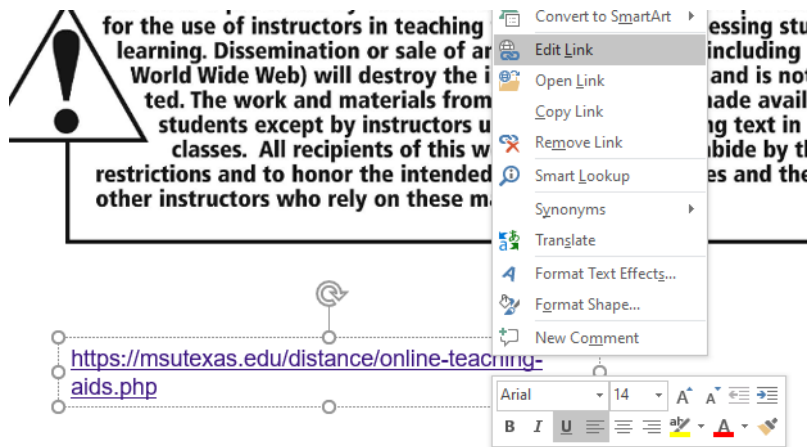
To insert a link, you’ll want to type out the description that you want the link attached to. Once that is in place, highlight the description and then right click and choose “link” from the dropdown menu.



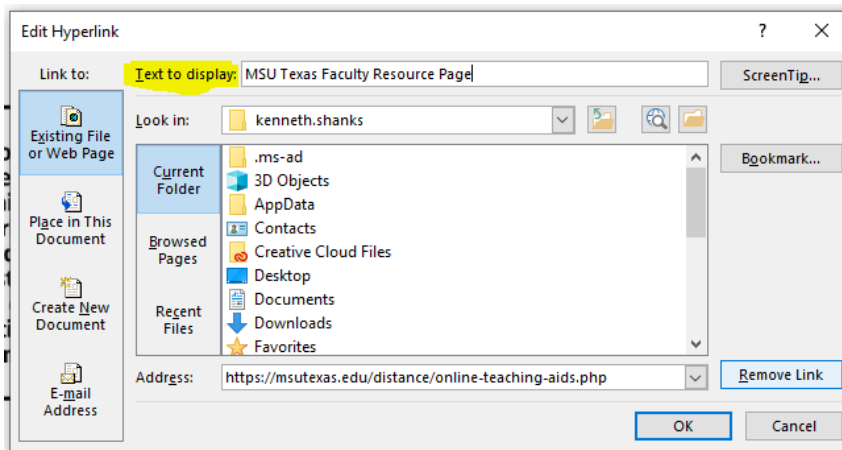
The Insert Hyperlink window will appear. Paste your link into the “address” section and then press okay. Your text will now be a descriptive hyperlink, appear blue, and underlined.



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” from the dropdown menu.



The Edit Hyperlink window will appear. In the “Text to display” box, put in the description for the hyperlink and press okay.



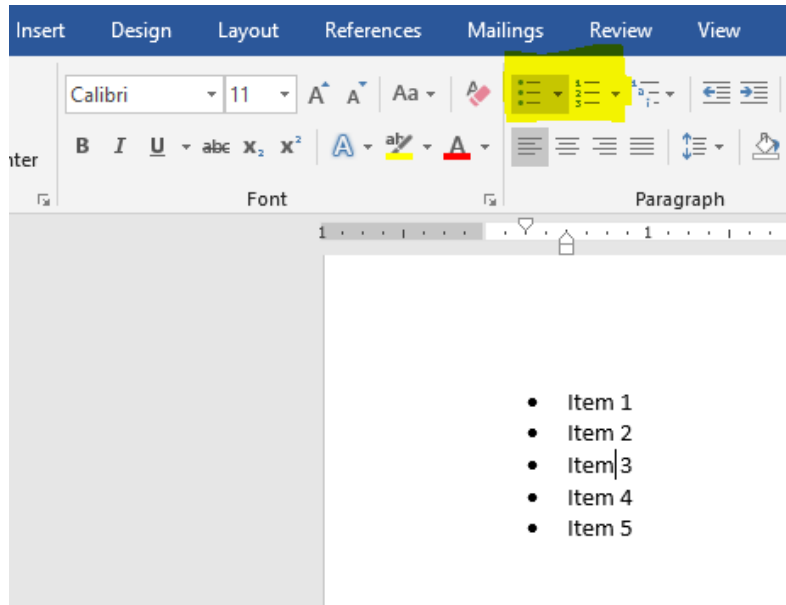
Additional Link Rules

- 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.

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 under the Paragraph section will be grayed out. This means that the list is utilizing that style. Anywhere you list 4 or more items should be correctly marked as a list.



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” from the dropdown menu.

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. In the options section, 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

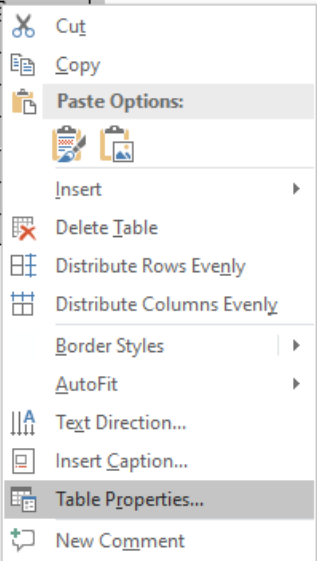
Previous Row Next Row

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” from the dropdown menu.

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, within the options section, uncheck “Allow row to break across pages.”

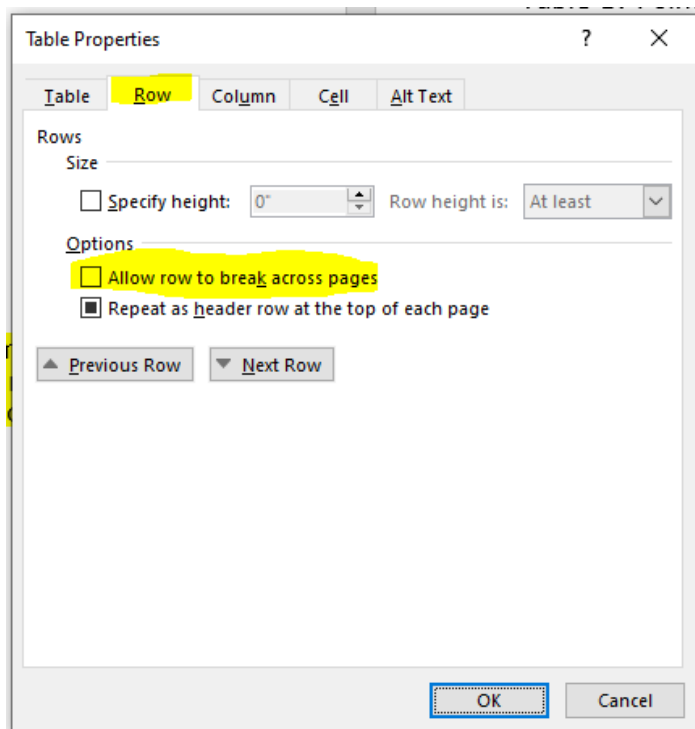


Table Properties

Table **Row** Column Cell Alt Text

Rows

Size

Specify height: 0" Row height is: At least

Options

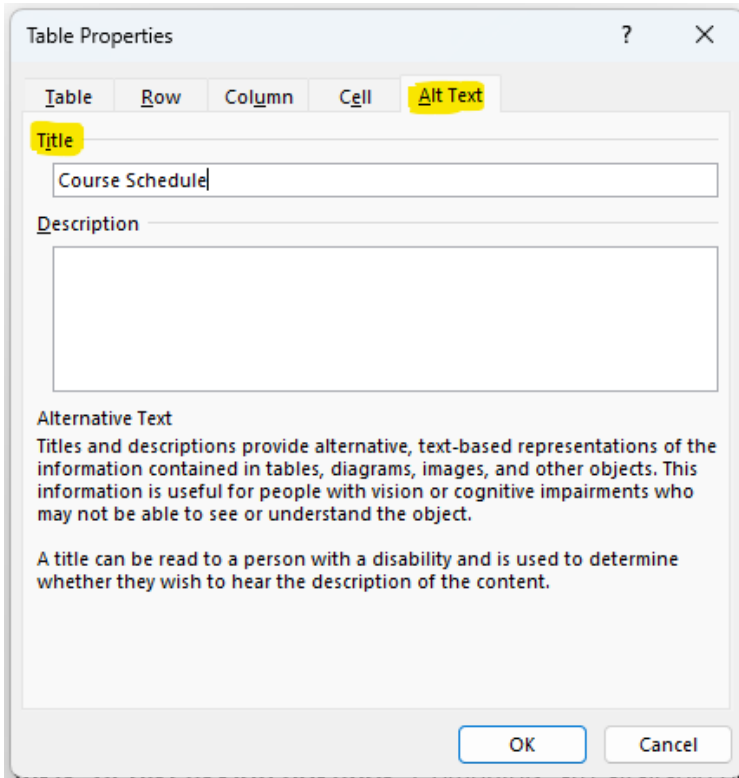
Allow row to break across pages

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 “Title” 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. You do not want to leave any blank spaces. 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. The one exception where you can use blank cells is if you are creating a table that the student has to fill in information themselves. You will want to inform the user right above the table that there will be blanks present for them to fill in. Here is an example message: “Certain cells left intentionally blank for you to fill in on your own.”

Color Contrast

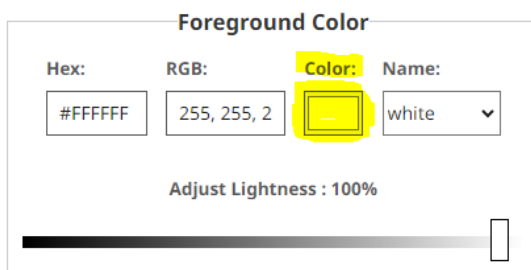
Color can be important to overall design but can cause issues for those with visual impairments or those who are colorblind. If you are using color, be sure to pick colors with high contrast. The rule to meet WCAG AA standards is a contrast of 4.5:1 for font below 18 points and 3:1 for font 18 points 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](#).

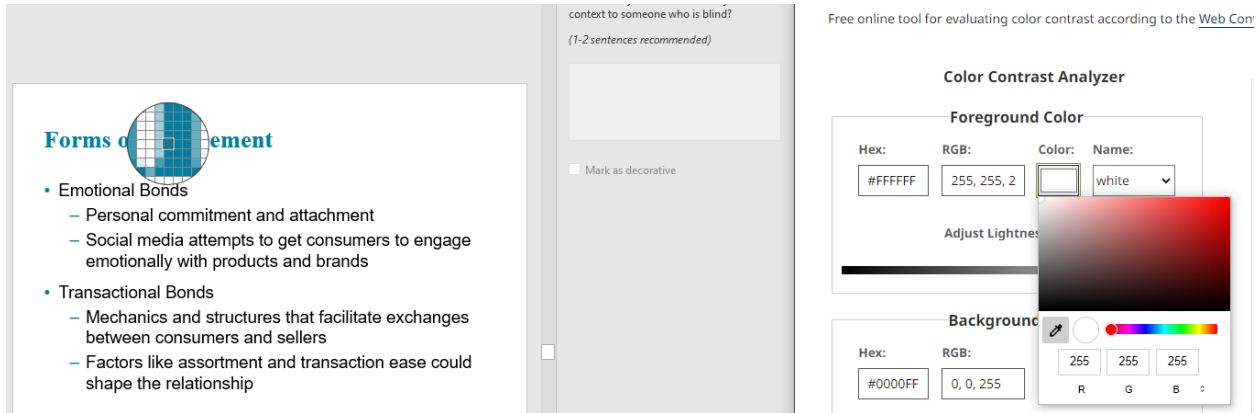
This website has three important areas: the foreground color, the background color, and the results.

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



The image shows a screenshot of the 'Foreground Color' selection interface. 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%' with a vertical bar on the right side.

This will open a small window where you can pick your color. Click on the little dropper from the dropdown menu. 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.



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. You do **NOT** need to worry about AAA standards.

Note: The Deque contrast checker works best in Chrome and does not work well in Firefox.

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, UI Components, & 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.

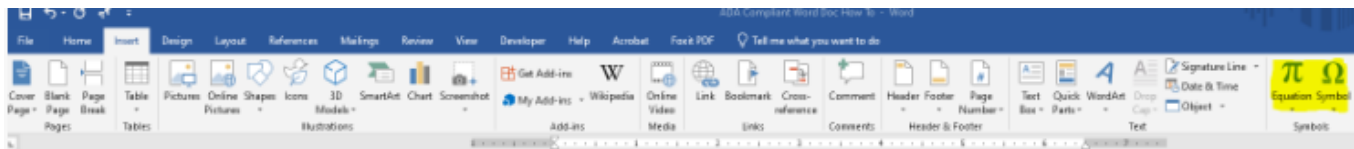
Here are a couple examples of sentences:

- *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 *.
- If you have an entire paragraph that is emphasized, best practice is to put ***Note:** or ***Important:** at the beginning of the paragraph.

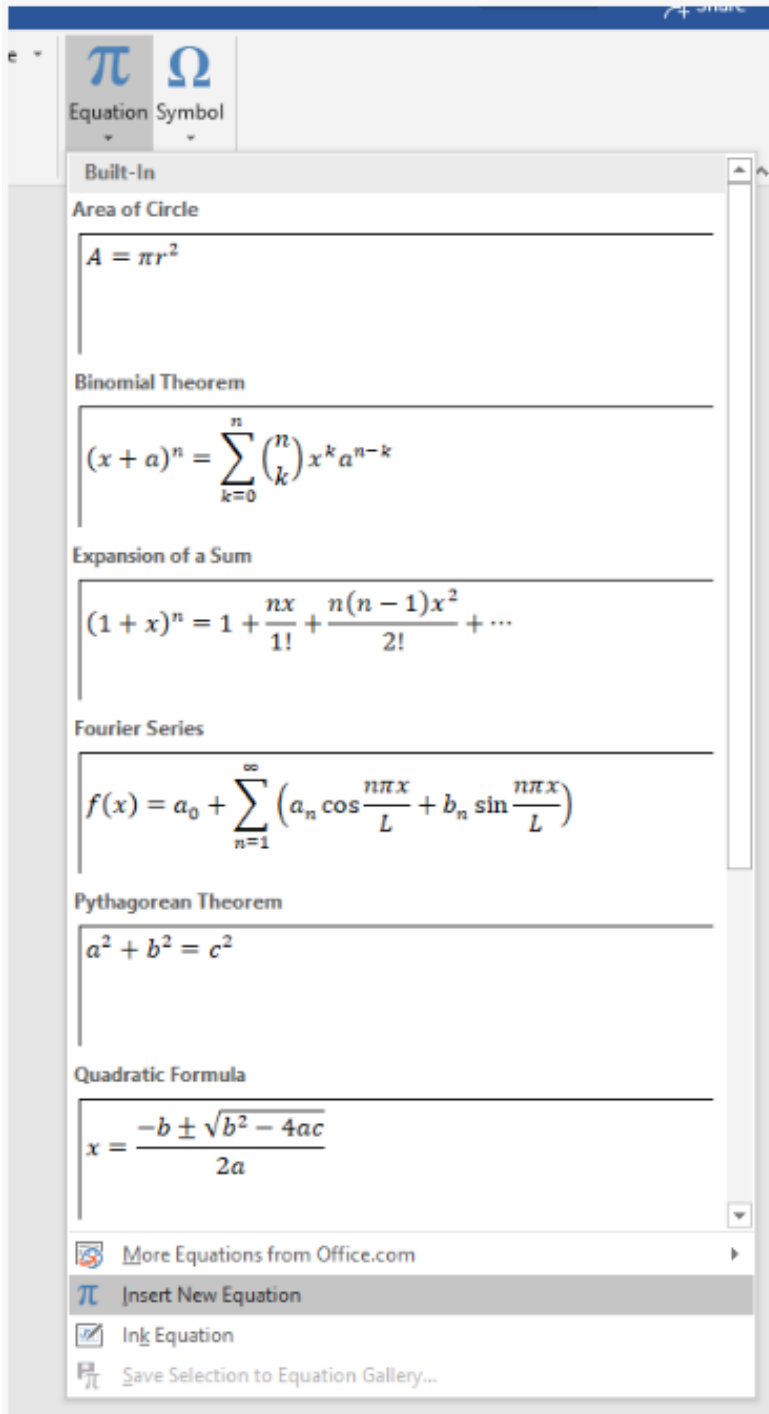
Math Equations

Math can be extremely difficult for screen reader users, especially if the document is not set up with them in mind. The best compliance for math equations will always be the built-in math equation tool.

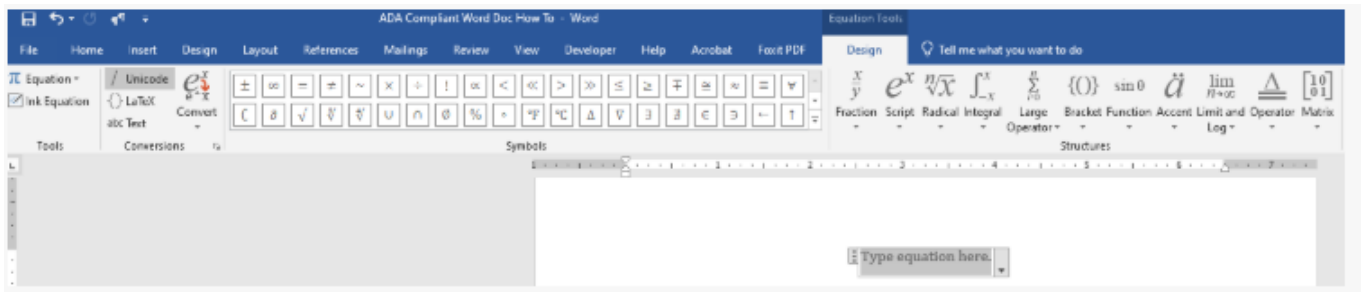
You can find the equation tool under the Insert tab in the top toolbar under the Symbols section. This tool will allow you to build just about any equation and it will read it correctly to screen readers.



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.



If you are unable to build your equation with this tool, the backup option is to put the equation in as an image and then provide **extremely descriptive** alt text to the image. The alt text you provide should read as if you are verbally saying the equation to someone.

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

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.

Language of Parts

Documents will start with a default language. For most documents the default language will be automatically set to English. If you use any other language in your document, it must be marked correctly under preferences. This makes it so that a screen reader will read the new language in the correct dialect to the user.

In this example, the second half of this paragraph is in Spanish. Since this is an English document I have to set the language preference of the Spanish sentences.

Alcohol and Drug Policy

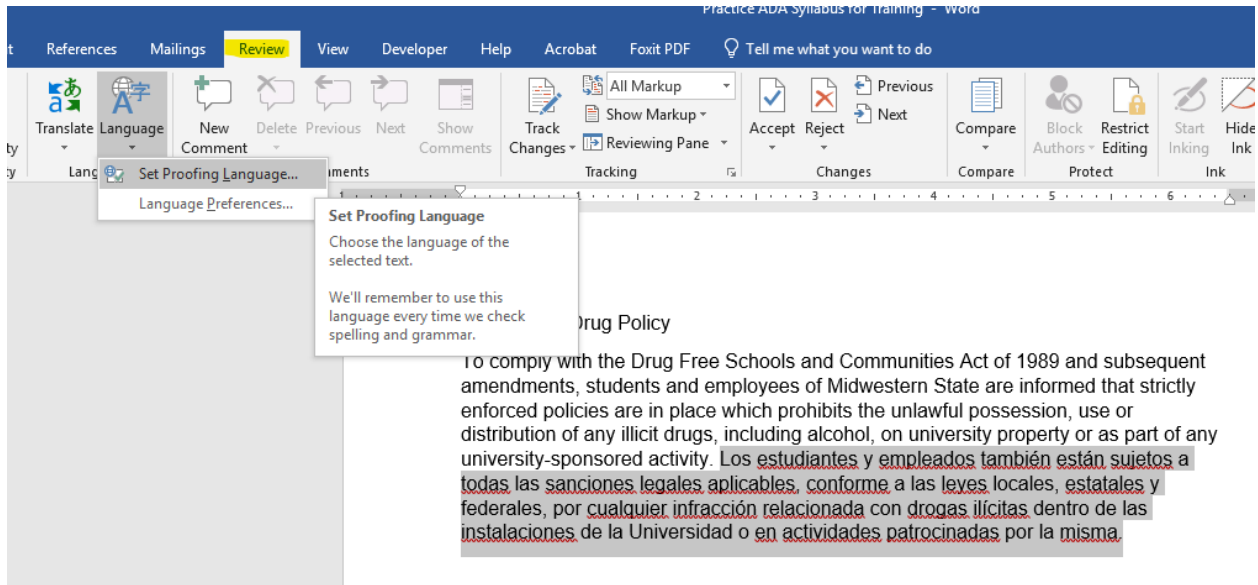
To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Los estudiantes y empleados también están sujetos a todas las sanciones legales aplicables, conforme a las leyes locales, estatales y federales, por cualquier infracción relacionada con drogas ilícitas dentro de las instalaciones de la Universidad o en actividades patrocinadas por la misma.



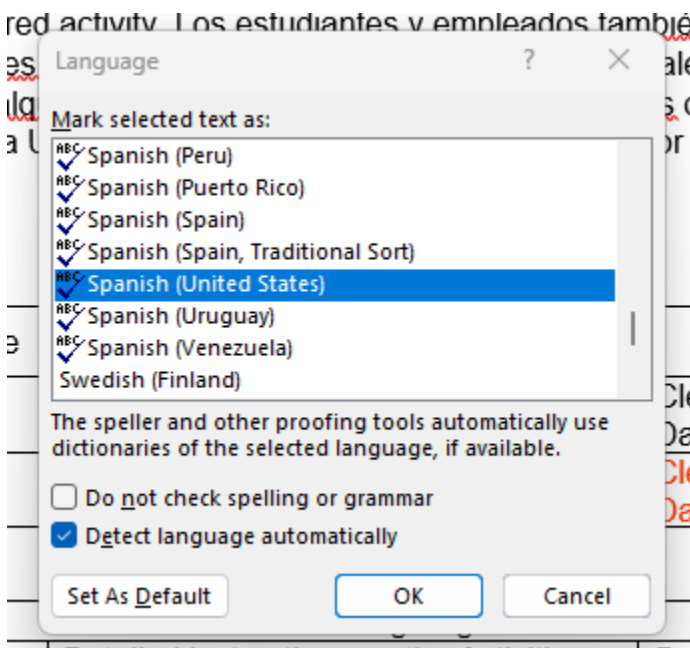
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Select the sentences that are in Spanish. Click on the Review tab in the top toolbar. Under the Language section click on Language. In the dropdown menu choose Set Proofing Language.



A new language window will appear. From the options choose the correct language. For this example, I am picking Spanish (United States). Press Ok once you are finished.

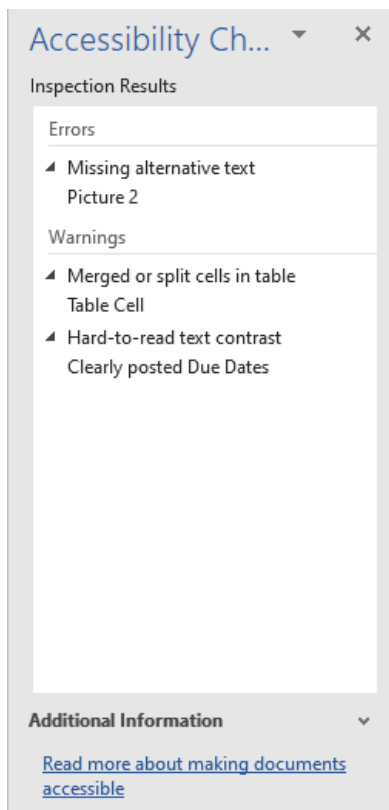
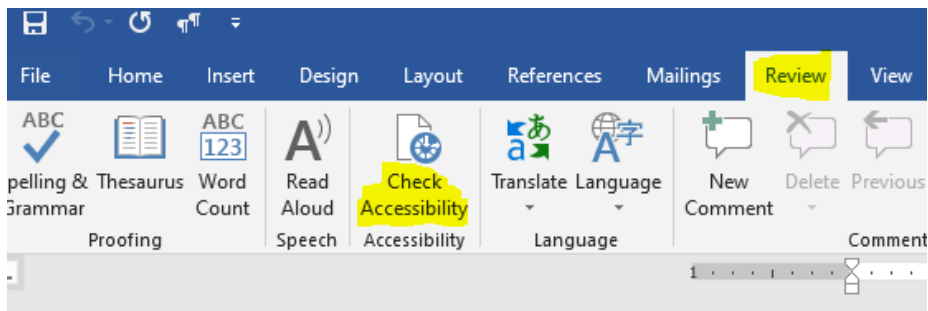


You will repeat this for any other sections where the language changes in your document. This must be done for full paragraphs, single sentences, single words, or even single letters if they are in a language different from the overall document.

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.



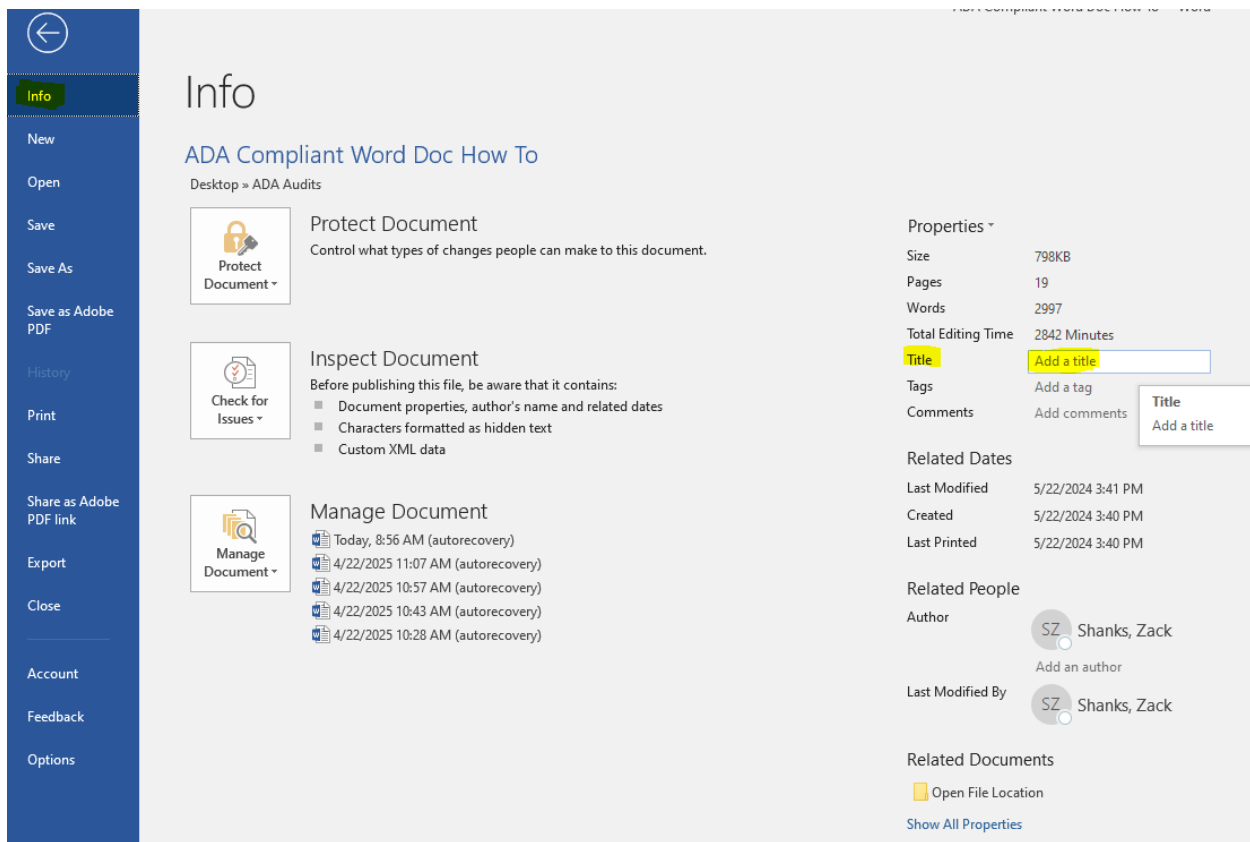
***Note:** It is a good habit to check the accessibility checker at least once before you finish your file.

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 top 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, under the properties section, 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 is 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

Saving Your File

Once you are finished your document as a Word file so that you will have the original version in case you need to make any changes. If you would like, you can also save the file as a PDF. PDF files are more universal but may lead to additional compliance being needed in the PDF file itself.

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. If you are wanting 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. Under the include non-printing information section, verify that the following options are checked:

- Create bookmarks using: Headings
- Document properties
- Document structure tags for accessibility

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.**

The screenshot shows the Microsoft Word 'Save As' dialog box with the 'Options' dialog box open. The 'Save As' dialog box has the following fields and options:

- File name: Practice ADA Syllabus for Training
- Save as type: PDF
- Authors: Shanks, Zack
- Tags: Add a tag
- Optimize for: Standard (publishing online and printing), Minimum size (publishing online)
- Buttons: Options.., Open file after publishing

The 'Options' dialog box has the following sections and options:

- Page range: All, Current page, Selection, Page(s) From: 1 To: 1
- Publish what: Document, Document showing markup
- Include non-printing information: Create bookmarks using: Headings, Word bookmarks, Document properties, Document structure tags for accessibility
- PDF options: PDF/A compliant, Bitmap text when fonts may not be embedded, Encrypt the document with a password
- Buttons: OK, Cancel

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.

Created By:

Office of Accessibility and Instructional Design

Online Education

Midwestern State University

