



MICROSOFT WORD ACCESSIBILITY GUIDE

Version 1.0 | Updated May 23, 2023





TABLE OF CONTENTS

Table of Contents	2
Structure	4
Styles	4
Headings	7
List	9
Navigation Pane	10
Structure Best Practices	11
Formatting	12
Spacing and Indentation	12
Text Decoration	13
Formatting Best Practices	19
Fonts	20
Accessible Fonts	20
Font Size	20
Links	22
Links: Do's and Don'ts	23
Appearance of links	23
How to insert a link in Word:	24
Cross References	25
Special Cases	27
Alternative Text and Images	29
How to add alternative text:	29
Decorative Images	30
Images of Text	31
Complex Images	32
Alternative Text Best Practices	33
Table of Contents	35

CALIFORNIA STATE UNIVERSITY **LONG BEACH**



Bob Murphy Access Center (BMAC) Accessible Instructional Materials (AIM) Center

How to Add Table of Contents	35
Tables	37
Data Table	37
Layout Table	37
How to Create accessible tables:	38
Tables Best Practices	39
Color Contrast	39
Color to Convey Information	40
Color Contrast Best Practices	41
Forms	42
Placement of text labels	42
Add Developer Tab	42
Control Contents	44
Legacy Tools	45
Accessibility Checker	51
Saving Word Docs into accessible PDFs	52
Accessibility Laws	55
Section 504 and the Americans with Disabilities Act of 1990:	55
Section 508	55
Accessible Technology Initiative (ATI)	55
This isn't just the law	56
Recap and Further Recommendations:	56
Resources	57





STRUCTURE

Structure is used to arrange document contents in a logical and meaningful manner. In Microsoft Word, there are ways to structure a document such as marking headings using Styles and grouping information together by using List.

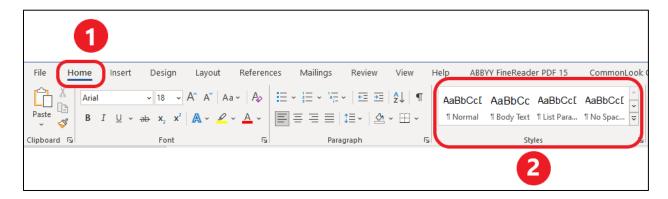
STYLES

Styles are used to provide structure to the content of the document. Instead of changing the format of the text manually by enlarging the font size, making it bold, etc. If this is done, the document has no real structure. Once a Style is created, it can be applied globally throughout the document. For example, if you want to make the heading appear similarly across all pages, a Style can be applied and updated automatically.

This section will outline to how use Styles in all common versions of Word.

LOCATING STYLES

- 1. Navigate to the Home ribbon.
- 2. Locate the Styles pane.



CREATE A NEW STYLE FROM SELECTION

Users can add new headings or customizable styles to the Styles Pane.

1. Highlight the desire text to add as a new style.

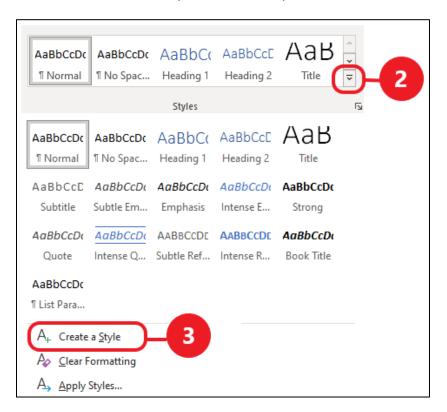




Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

- 2. Using the dropdown icon in the Styles pane, expand the option menu.
- 3. Select Create a Style from the dropdown list.



MODIFYING STYLES

You can make changes to a specific style to fit your needs. The modified style will be applied across all pages.

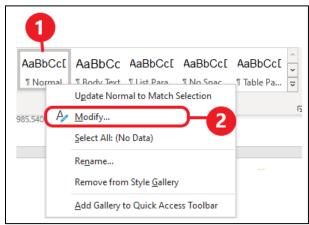
1. Right click on a specific style option.



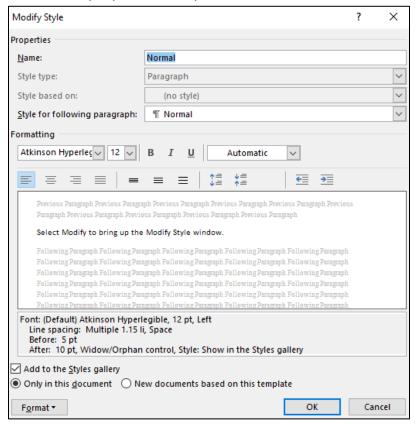
Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

2. Select **Modify** to bring up the **Modify Style** window.



3. In the Modify Style window, you can customize text formats and style.



For more information, see Microsoft customize or create new style.

BODY/NORMAL STYLE



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

Body/Normal styles are used for the rest of your document's content that are not headings and subheadings. Typically, normal style is applied to paragraphs of text.

- 1. Highlight the desired area; in this case, we will highlight the rest of the document's content that is not assigned with a heading or subheading.
- 2. In the Styles Pane Window select the **Body Text** or **Normal** style.

HEADINGS

Headings arrange contents in a hierarchical order. Heading structures need to follow an ascending order, H1 – H6. For example, the document's title should be heading level 1, and main sections should be level 2 and so forth. Proper heading structure allows assistive technology users to navigate to different sections of a document quickly without having to read the entire document.

- Heading 1: Title of document
- **Heading 2**: Main Section
- Heading 3: Subsection
- **Heading 4 6**: Can be used to further to separate different sections of the document.

Note: Avoid using the Title Style in substitution for H1 as it can get converted into H4 in PDF in some cases.

EXAMPLE OF HEADING STRUCTURE:



Bob Murphy Access Center (BMAC) Accessible Instructional Materials (AIM) Center

U.S. History

H2 American Revolution:

was an ideological and political revolution that occurred in British America between 1765 and 1791. The Americans in the Thirteen Colonies formed independent states that defeated the British in the American Revolutionary War (1775–1783), gaining independence from the British Crown and establishing the United States as the first nation-state founded on Enlightenment principles of liberal democracy.

H3 Thirteen Colonies:

known as the Thirteen British Colonies, [2] the Thirteen American Colonies, [3] were a group of British colonies on the Atlantic coast of North America. Founded in the 17th and 18th centuries, they began fighting the American Revolutionary War in April 1775 and formed the United States of America by declaring full independence in July 1776. Just prior to declaring independence, the Thirteen Colonies in their traditional groupings were: New England (New Hampshire; Massachusetts; Rhode Island; Connecticut); Middle (New York; New Jersey; Pennsylvania; Delaware); Southern (Maryland; Virginia; North Carolina; South Carolina; and Georgia).

H2 Civil Rights Era:

H3 24th Amendment

the United States Constitution prohibits both Congress and the states from conditioning the right to vote in federal elections on payment of a poll tax or other types of tax. The amendment was proposed by Congress to the states on August 27, 1962 and was ratified by the states on January 23, 1964.

HEADING STRUCTURE: DO'S AND DON'TS

Do's:

- Apply Styles to document headings.
- Follow hierarchical heading order (H1, H2, H3, and so on).
- Make level headings appear differently so visual users can distinguish the headings for different sections.
- Use simple and accessible font style for headings.

Don'ts:

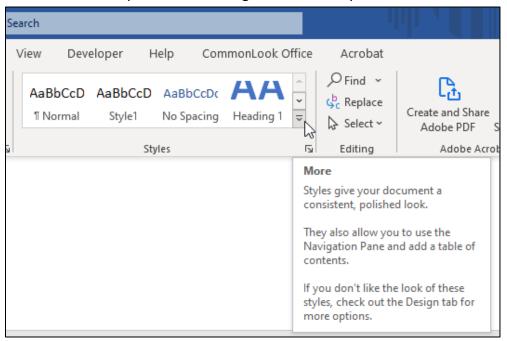
- Use Font decoration such as enlargement or bold text to make content look like headings.
- Skipped heading level such as using Heading 3 after Heading 1.
- Use fancy font decoration.





APPLY HEADINGS AND SUBHEADINGS STYLES TO YOUR DOCUMENT

- 1. Highlight the desired text that you would like to make into a heading.
- 2. In the **Styles Pane window** select the **Heading 1** style to create a primary heading. You can also select the pulldown menu right below the Styles Pane to access more options.



LIST

Lists are used to format information sequentially without the use of characters such as plus signs or asterisks. Always use Bullets or Numbering tools instead of other characters for listing information.

BULLETED LIST VS NUMBERED LIST:

- Use **numbered list** for items that specify order.
 - Examples: timeline or set of instructions
- Use **bulleted list** where order is not important.
 - Example: grocery or recipe list.

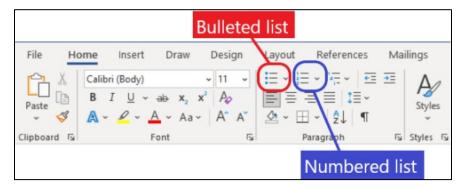
Note: Lists can be mixed such as using a bulleted list inside a numbered list, or vice versa.



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

HOW TO CREATE A LIST:

- 1. Highlight the text you wish to format.
- 2. Make sure you are in the **Home** tab.
- 3. In the Paragraph panel, select the desired list type.

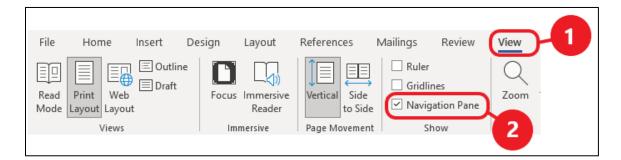


NAVIGATION PANE

The Navigation Pane is extremely important for ensuring your contents in the document is tagged properly. This pane also allows you to view different headings and subheadings in the document to ensure they are structured correctly.

To access the Navigation Window:

- 1. Select the "View" tab.
- 2. Check the option for "Navigation Pane." Alternatively, you can navigate to the Review tab. Select Check Accessibility menu dropdown and choose Navigation pane.
- 3. The Navigation Pane should appear on the left side panel, listing the headings as an outline for the entire document.



For more information, see Microsoft Support - Use the Navigation Pane.



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

STRUCTURE BEST PRACTICES

- Use hierarchical heading levels providing correct H1, H2, H3, and so on.
- Avoid skipping heading levels.
- Use Styles to apply headings to the entire document.
- Use Lists to organize contents in sequential order.
- Use Navigation Pane to check for proper content structure in Word.



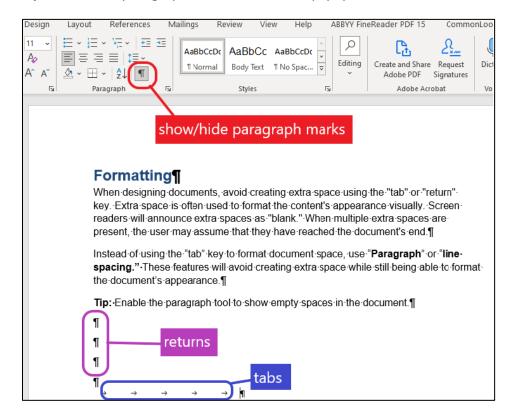


FORMATTING

When designing documents, users often want to create empty spaces between paragraphs or text within the document. However, most users create extra space using the "tab" or "return" key will generate accessibility issues such that screen readers announce extra spaces as "blank." When multiple extra spaces are present, screen reader users may assume that they have reached the end of the document.

Instead of using the "tab" or "return" key to format document space, use **Paragraph Settings**. This feature will allow you to create extra spaces between paragraphs, indentation, and line spacing while maintaining the appearance of the document.

Tip: Enable the paragraph marks to show empty spaces and tabs in the document.



SPACING AND INDENTATION

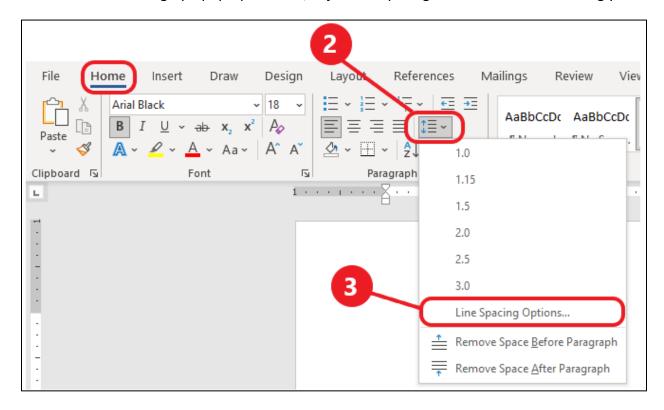




Spacing and indentation can be used in Styles when creating headings and body/normal text or it can be adjusted by using Paragraph Settings.

HOW TO MODIFY SPACING AND INDENTATION:

- 1. Select the desired text.
- 2. In the Home tab, select Line and Paragraph Spacing.
- 3. From the drop-down list, select Line Spacing Options...
- 4. From the Paragraph pop-up window, adjust the Spacing and Indentation accordingly.



For more information, see Microsoft Support: Adjust indents and spacing.

TEXT DECORATION

FONT FORMATTING

Font format is use for visual presentation of the document. Once a style is added or modified, it can be applied globally to the entire document. You may have different styles for various levels



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

of heading, list structure, table or image caption, links, etc. Each style also comes with font size, color, spacing, indentation, etc.

There are various options to explore in the Styles settings to customize your font style such as:

- Font
- Paragraph
- Tabs
- Border
- Language
- Frame
- Numbering
- Text Effects

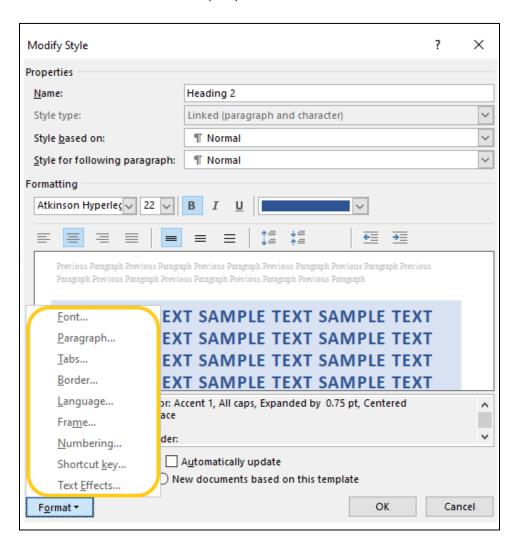
Explore the listed options to format the font styles that fit your needs.





Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



HORIZONTAL LINE

Horizontal line is commonly used to separate headings from body text. Horizontal lines can be added when modifying an existing style or creating a new style.

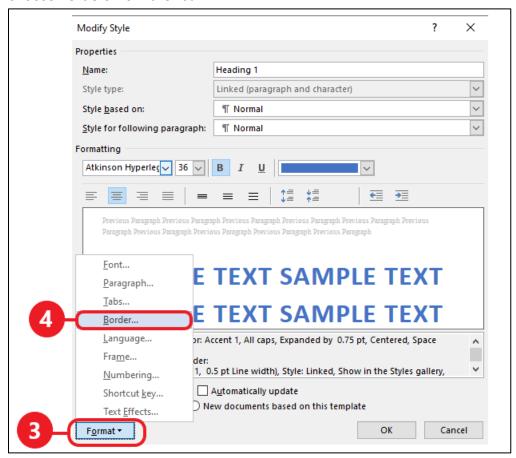
To create a horizontal line:

- 1. Right-click on a specific heading style from the Styles pane.
- 2. Select **Modify**.
- 3. From the Formatting pop-up window, select **Format** from the dropdown menu.



Bob Murphy Access Center (BMAC)
Accessible Instructional Materials (AIM) Center

4. Choose **Borders** from the list.



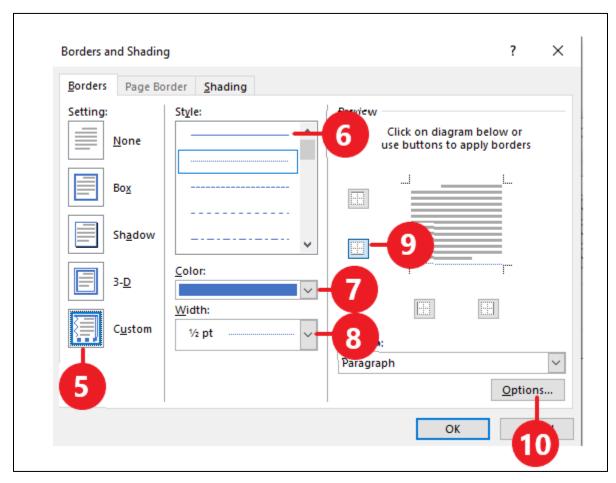
- 5. From the Borders and Shading window, select **Custom** option from the Borders tab.
- 6. Select a line style from the list.
- 7. Select color for the line style.
- 8. Select the width of the line.
- 9. In the Preview window, choose a diagram with an indication of the bottom horizontal line.
- 10. To create line spacing between the horizontal line and the text, click on **Options** button.
- 11. Adjust the **Top and Bottom option** within the Border and Shading Options window.





Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



Note: you can apply top, left, and right border to create a box border effect to the paragraph if you wish to.

PAGE BORDERS

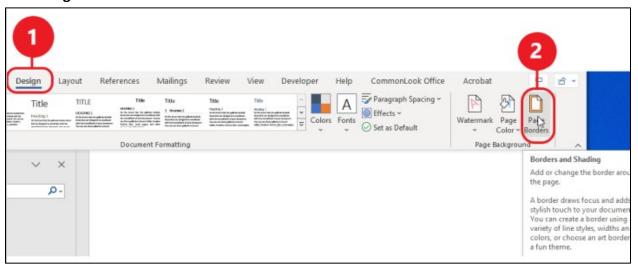
If you do not wish to apply border to paragraphs, instead, to apply border to a specific page or the entire document:

1. Navigate to the **Design tab**.

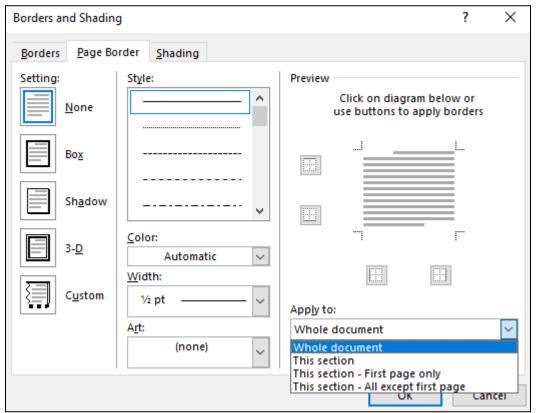


Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

2. Select Page Borders.



3. From the Borders and Shading context window, use the **Apply to:** dropdown list and select an option.







FORMATTING BEST PRACTICES

- Use Line and Paragraph Spacing settings to add empty spaces between paragraphs.
- Avoid using "Return" key to create space between text.
- Use Indentation settings to add spaces at the beginning of text line.
- Avoid using "Tab" key to create indentation.
- Use Borders settings to create a horizontal line and text decoration.
- Use Page Borders functionality to create box border effects to specific page or entire document.
- Avoid using Shapes to create borders as Word will recognize it as an image and will ask for alternative text.
- Avoid manually entering underscores to create horizontal line effect.





FONTS

Use simple and accessible fonts when formatting a Word document. Highly recommend using built-in fonts within Microsoft Word as it can be access across platforms and operating systems.

ACCESSIBLE FONTS

Use Sans-Serif fonts such as Arial, Calibri, Verdana, Tahoma, Helvetica, etc.



Note: avoid using various types of fonts and overly decorative fonts within the same document as it can affect individuals with cognitive disability.

For more information on accessible fonts, see Google's Introducing accessibility in typography.

FONT SIZE

Font size is extremely important for users with visual impairment. Ensure that the font size for Normal/Body Style is 12 points or larger. Font size can be set within the Styles setting when creating a style or modifying a style.

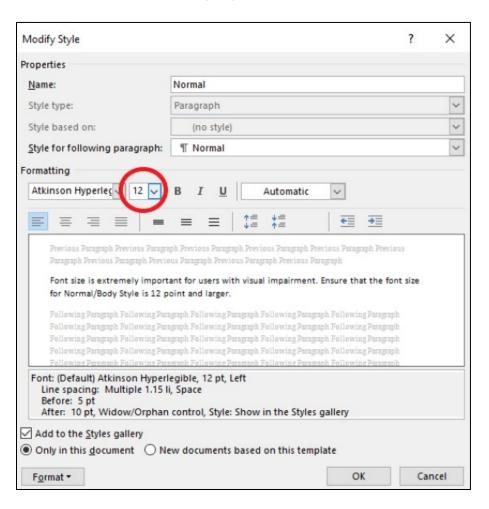
CALIFORNIA STATE UNIVERSITY

LONG BEACH



Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



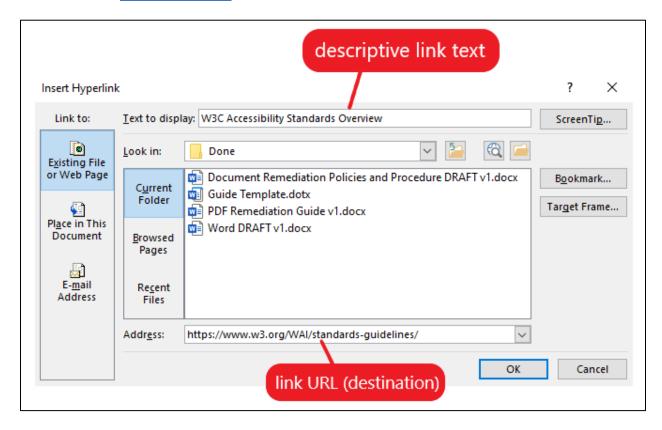




LINKS

Link text should provide a clear description of the link destination, rather than only providing the URL. There are many options when it comes to including a hyperlink in your document. You can insert and attach a hyperlink with an email, an external document, and webpage.

Note: Avoid using "Place in This Document" when linking to a specific section within the document. See <u>Cross References</u> for more information.



Links must have a descriptive link text that describes the intent or purpose of the link. For example, avoid using "Click here" or "Read more." Assistive technology users often navigate through links to skim through the document, when they come across links descriptions like "Click here," they will not understand the purpose or the link's destination. Instead, include the webpage or document title as the link description. In addition, long URL addresses can be cumbersome for assistive technology users to listen to.



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

LINKS: DO'S AND DON'TS

Do's:

- Use descriptive link text that describes the intention of the link.
- Good examples:
 - CSULB Accessible Instructional Materials (AIM) Center
 - W3C Accessibility Standards Overview

Don'ts:

- Use ambiguous link text or long URL addresses.
- Bad examples:
 - Click here or read more
 - https://www.w3.org/WAI/standards-guidelines/

APPEARANCE OF LINKS

Links must be visually different from regular text. Links are often identified with underline and color. Ensure that color should not be the only method to identify links and should be accompanied by an underline or italics. Both these methods will help increase the document's readability by allowing the reader to identify links visually.

The Bob Murphy Access Center is a student support program within the Division of Student Affairs. Our mission is to assist students with disabilities as they secure their university degrees at California State University, Long Beach. We provide services to over 1,500 students each semester. Over 10,000 students with disabilities have graduated from California State University, Long Beach with support from our program.

Figure 1 In the example above, there are no visual indicators for links. Visual readers will not know that links are present within the paragraph of text.



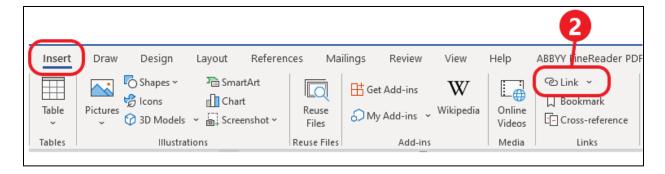


The <u>Bob Murphy Access Center</u> is a student support program within the <u>Division of Student Affairs</u>. Our mission is to assist students with disabilities as they secure their university degrees at <u>California State University, Long Beach</u>. We provide services to over 1,500 students each semester. Over 10,000 students with disabilities have graduated from California State University, Long Beach with support from our program.

Figure 2 In the example above, the links appear different from the surrounding text. The link text contains a combination of color and underline. The combination of these indicators will make the links apparent to visual readers.

HOW TO INSERT A LINK IN WORD:

- 1. Highlight the desired text
- 2. In the **Insert tab**, select **Link**. Alternatively, the user can right click and select Link from the context menu.

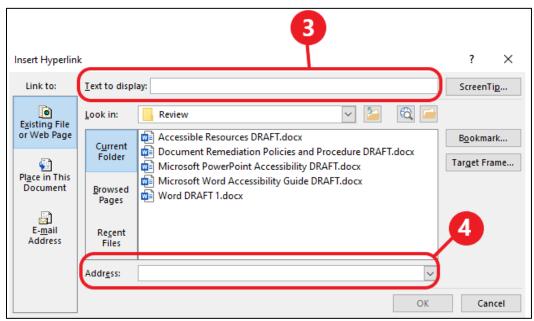


3. In the Insert Hyperlink pop-up window, enter in the Text to display.





4. In the **Address** field, ensure that the complete URL is included, and the text corresponds with the correct URL address. Click Ok to insert link.



CROSS REFERENCES

Cross references are links within the document that are used to refer to another place in the document. Cross references are inserted as fields, which ensure contents get updated whenever there is a change. This is not to be confused with the Table of Contents which lists all sections of the document.

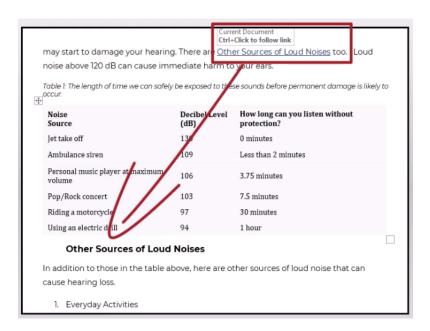
CALIFORNIA STATE UNIVERSITY

LONG BEACH



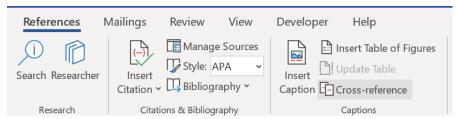
Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



HOW TO ADD CROSS-REFERENCE

- 1. Navigate to the Reference tab.
- 2. Select Cross-reference.



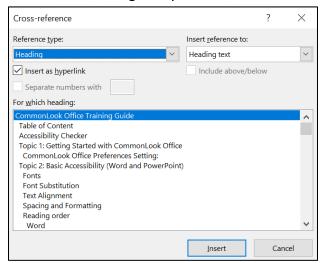




Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

3. Choose the heading that you want to reference to.



- 4. Select Insert to add cross-reference link.
- 5. Format the link style so it can be easily recognized.

SPECIAL CASES

LINKING PHONE NUMBERS AND EMAIL ADDRESSES:

It is highly recommended to use both descriptive link text followed by actual email or phone number, allowing users to save this information for future reference.

Example of email address: AIM Center (aimc@csulb.edu)

Example of phone number: BMAC Main Office (562-985-5401)

LINKS ON PRINT DOCUMENTS:

If the document is available digitally and as a physical copy, it is preferred to include a descriptive link text followed by the full URL address of the link.

Example: CSULB College of Business [https://www.csulb.edu/college-of-business]

LINKS FOR FILE DOCUMENT TO DOWNLOAD:

If the link is direct to open or download a document like PDF, include the title as the link text followed by the file type.





Example: 2022-2023 CSULB Academic Calendar (PDF)





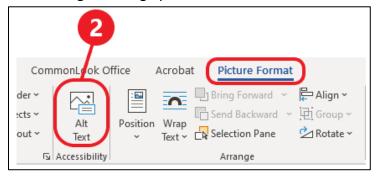
ALTERNATIVE TEXT AND IMAGES

Alternative text also known as "alt text" is a brief 8 to 120-character description describing the elements of the image or what the image is conveying. Assistive technology relies on alternative text to describe the image to the reader. In situations where the image is not available to the reader, perhaps because they have turned off images in their web browser or are using a screen reader due to a visual impairment, the alternative text ensures that no information or functionality is lost. The content creator is the best person to determine the alternative text for an image. Context is important when determining the alternative text; it will let you know if the alternative text is too descriptive or not descriptive enough.

Note: Images must be placed "In Line with Text" to ensure logical reading order.

HOW TO ADD ALTERNATIVE TEXT:

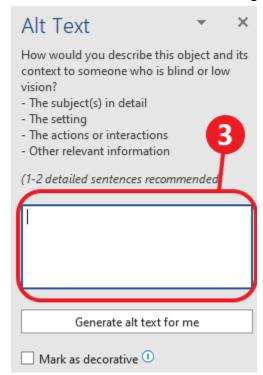
- 1. Select the desired object.
- 2. Navigate to the **Picture Format tab** and select **Alt Text**. Alternatively, you can right click on the image to bring up the Context Menu and select Edit Alt Text.







3. Enter the alternative text for the image in the entry field.



DECORATIVE IMAGES

Decorative images are images that present no important content to the context of your document. They are purely aesthetic. If you have images in your document that serve visual purposes and do not provide any information (clip art, banners, background images, etc.), mark them as decorative.

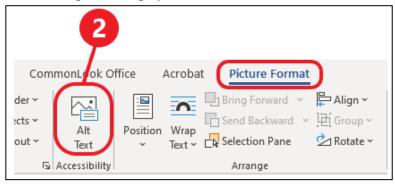
HOW TO MARK IMAGES AS DECORATIVE:

1. Select the desired object.





2. Navigate to the **Picture Format tab** and select **Alt Text**. Alternatively, you can right click on the image to bring up the Context Menu and select Edit Alt Text.



3. Select the "Mark as decorative" checkbox in the Alt Text pane that opens on the right-hand side.



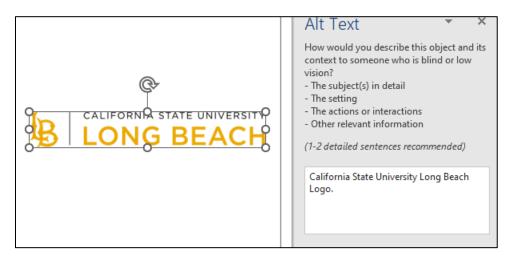
IMAGES OF TEXT

Images of text display text as an image. It is highly recommended using actual text rather than image of text. Actual text is much more flexible in comparison to images of text that it can be resized without losing clarity and enable users to customize things like color and contrast based on user's preferences. Image of text is best use as logo when the visual presentation is essential.





Alternative text for images of text should reflect the text within the image. If the image contains more than 120 characters, consider including the text elsewhere within the document.



COMPLEX IMAGES

Complex images are images that convey substantial information and require over a 120-character description, such as graphs and charts. Figure captions can be used in addition to alt text and are placed above or below the image. Contrary to alt text, there is no character limit for figure captions.

Note: an image that has a figure caption also needs to include alternative text since alternative text is required for all images. Ensure that alternative text does not repeat exactly what is already stated in the figure caption.

Tip: Alternative text for complex images can briefly describe the image and reference to read more in the figure caption. If the description of the figure caption is too long, provide an external link to the source for reference.

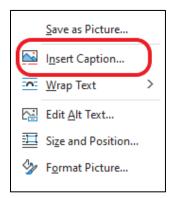
HOW TO ADD FIGURE CAPTIONS:

- 1. Select the desired object.
- 2. Right click to bring up the context menu and select **Insert Caption**.

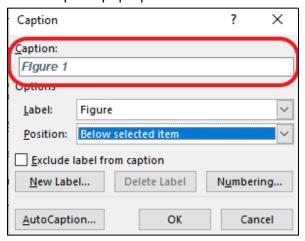


Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



3. In the Caption pop-up window. Enter the description for figure caption.



ALTERNATIVE TEXT BEST PRACTICES

- Avoid using phrases such as "image of" or "photo of" for alt text because screen reader will repeat this information.
- Avoid using images of text due to low image quality when resized.
- The "Alt Text" tool does not have spell check, please ensure that the alt text is spelled correctly.
- Avoid using the "generate a description for me" feature because the alternative text may not always be accurate.
- Decorative images that do not convey any meaning do not require alternative text and should be mark as decorative.
- If the alternative text is too long, consider using figure caption to provide descriptive information for complex images.





- If the type of image is important such as water painting or pencil drawing, include it in the alt text.
- Avoid using screenshots or images of lists, tables, or similar contents as alt text can be very long and content structure is not available for screen reader users.





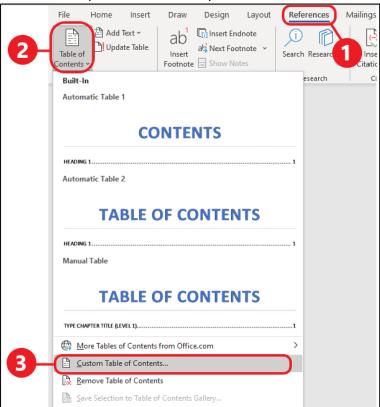
TABLE OF CONTENTS

Create a table of contents for long documents to help readers navigate through the document. Much like headings, the table of contents gives users an overview of the document and allows them to navigate to specific sections.

Tip: Structure the headings in your document first; headings are used to generate the table of contents

HOW TO ADD TABLE OF CONTENTS

- 1. Navigate to the "References" tab.
- 2. Select the "Table of Contents" table.
- 3. Choose a template from the dropdown menu or **customize** your own table of contents.



If you choose **Custom Table of Contents...**, you can modify the heading level that are included in the Table of Contents.

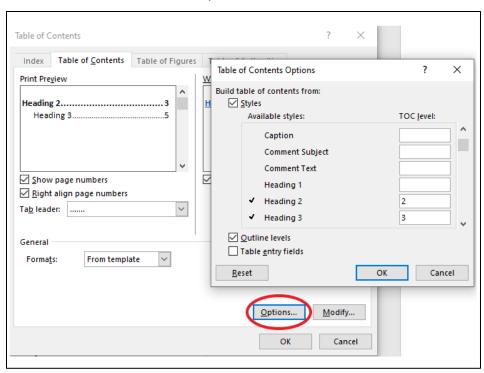




Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

To eliminate Heading 1 from appearing in the table of contents, select **Options**... and delete the number 1 from the Available styles.



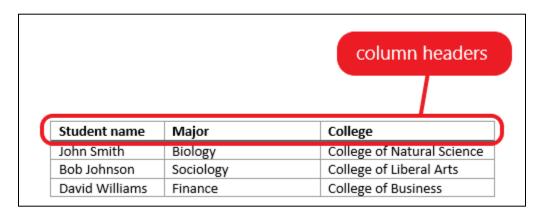




TABLES

DATA TABLE

Data tables are used to present relationships between the data cells in a grid or tabular format. Data tables must have column/rows headers to be accessible.



LAYOUT TABLE

Layout tables do not present any associations between the cells and are not format with columns headers, they are typically used to organize visual information. Avoid using layout tables as they are inaccessible and do not provide meaningful order of the content.

Push			Activate
The		То	
	Button		

Figure 3 Visual users will read the table as "Push The Button To Activate", however, if not linearized properly, the screen reader will read it as "Push Activate The To Button." In many cases, the linearized reading order and visual reading order may not be the same, thus, making it difficult for screen reader users to understand the contents within layout table.



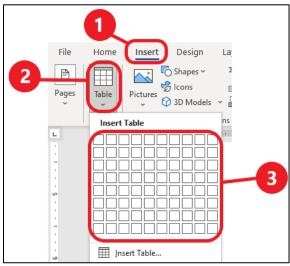


To learn more about the differences between data and layout tables, see <u>WebAIM Creating</u> Accessible Tables.

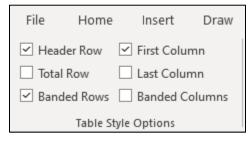
HOW TO CREATE ACCESSIBLE TABLES:

There is only one proper way to create a table in Microsoft Word. Follow these simple steps to create an accessible table:

- 1. Navigate to the **Insert tab**.
- 2. Select the **Table** functionality.
- 3. Choose the number of rows and columns for your table.



4. Ensure that the **Header Row** (column headers) check box is checked.



5. Highlight the first row of the table.

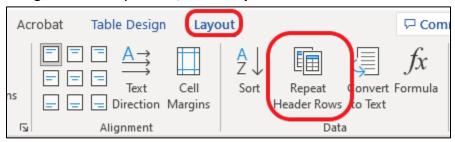




Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

Navigate to the Layout tab, select Repeat Header Rows.



Note: Repeat Header Rows enable the column headers to repeat across multiple pages in case you are dealing an awfully long table. If you change column header on the first page, the headers change on other pages.

TABLES BEST PRACTICES

- Have clear and understandable column or row headers (week, due date, grades, topic, etc.)
- Use Repeat Header Rows for tables that span more than one page.
- Use data table to present tabular information.
- Use a simple table with single-level header.
- Avoid merging cells.
- Avoid merging multiple tables together.
- Avoid layout tables.
- Avoid low contrast cell colors.
- If a table has an empty cell, indicate that there is no data such as N/A or Not Applicable.
- Ensure that the table borders are visible.
- Avoid adding table title (known as a caption) in a table cell. Caption should be placed before or after the table.
- Avoid using vertical text as it is can be difficult to read.
- Avoid breaking contents of the same row to another page as it can be difficult to navigate for contents.

To read more about accessible tables, see CSUN Web Accessibility Criteria: Tables.

COLOR CONTRAST





Color is often used to make documents visually appealing and attract the reader's attention. Color contrast is related to the relationship between colors and their perceived visibility. In the context of accessibility, it is advised that the content creator use high contrast color combinations to avoid any potential issues with reading/visibility.

Color contrast should meet the minimum Level AA standard and maintain at least a color contrast ratio of 4.5:1. There are different accessibility software and programs, such as the <u>WebAIM Contrast Checker</u>, to check for color accessibility.

For example, black print on white paper or white print on black paper are high contrast color combinations. Students who are color blind can potentially have issues with low contrast color combinations.

COLOR TO CONVEY INFORMATION

Color should not be the only method to convey information. Readers that cannot perceive color will be unable to understand the context or representation of the color. Instead, in combination with color, use different objects such as shapes to differentiate between content.

EXAMPLE OF COLOR INFORMATION:

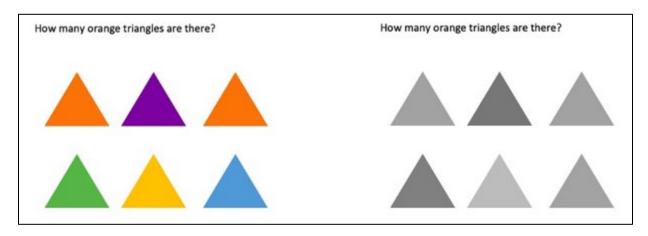


Figure 4 The image on the left shows the color version to demonstrate how readers perceive color will view the image. They will be able to find the number of orange triangles. The image on the right shows how people cannot perceive color will view the image. They will be unable to find the number of orange triangle as they all appear the same.

LONG BEACH



Bob Murphy Access Center (BMAC)
Accessible Instructional Materials (AIM) Center

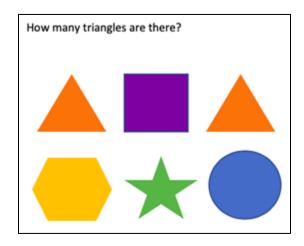


Figure 5 This image asks, "how many triangles are there?" This question does not rely on sensory characteristics such as color to understand its context.

COLOR CONTRAST BEST PRACTICES

- Avoid using light orange, red, and green against a white background in your template and text.
- Use texture or label in graphs, instead of color, to highlight points of interest.
- Circle to highlight information, rather than relying on color.
- Keep the overall contrast in your presentation high. In other words, avoid using light colored text against light backgrounds, and dark colored text against dark backgrounds.
- WebAIM Contrast Checker and Colour Contrast Analyser are free software that checks contrast accessibility for background and foreground colors using WCAG 2.1 standards.
- <u>Color Safe</u> develops accessible color palettes.





FORMS

Prior to creating a form, users should outline what kind of questions will be asked and the type of answers that are expected whether the users are going to interact with check boxes, text field, radio buttons, etc. Questions and labels for any kind of form field should be simple and understandable.

Depending on the needs of the content creator, forms can either be completed in Microsoft Word or Adobe Acrobat Pro for PDF. There are two different form functionalities in Word that you can generate:

- **Content Controls**: use to generate and complete the form in Microsoft Word and can be post online as a completed PDF.
- **Legacy Form**: use to complete the form in Adobe Acrobat Pro (PDF) and can be post online as a downloadable template.

Note: In order to convert fillable form fields from Microsoft Word to PDF, you must have CommonLook Office installed on your machine. Using "Save As PDF" or "Adobe PDFMaker" will flatten out the form fields, as a result, the document will be saved and show as regular text without the associated fillable form fields.

PLACEMENT OF TEXT LABELS

The placement of label is not required by standard but as recommended:

- Labels are placed to the left of the text field and drop downs.
- Labels are placed to the right of check boxes.

ADD DEVELOPER TAB

Developer tab allows users to add fillable form fields within Microsoft Word documents.

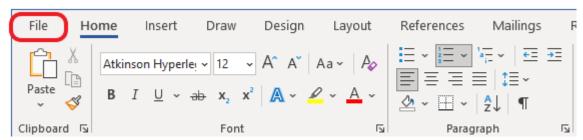
If you do not have the Developer ribbon already added in Microsoft Word:

LONG BEACH



Bob Murphy Access Center (BMAC) Accessible Instructional Materials (AIM) Center

1. Navigate to File menu.



2. Select Options.

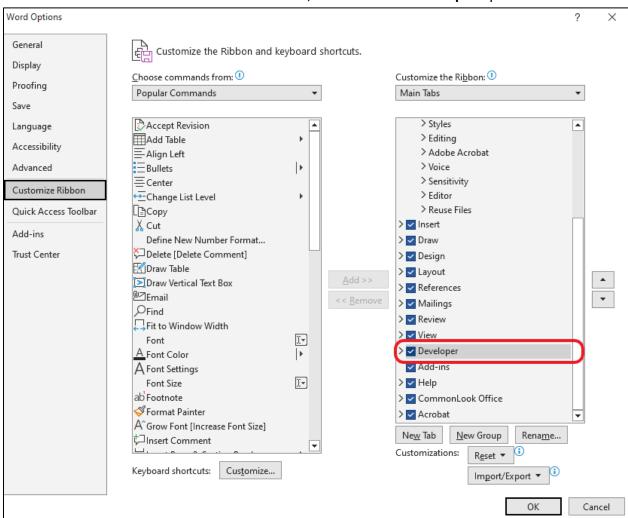


3. Select Customize Ribbon.





4. Under the Main Tabs for Customize the Ribbon, check box the **Developer** option.



CONTROL CONTENTS

As mentioned previously, Controls Contents are used with the purpose of creating form fields for users to fill out in Microsoft Word only.

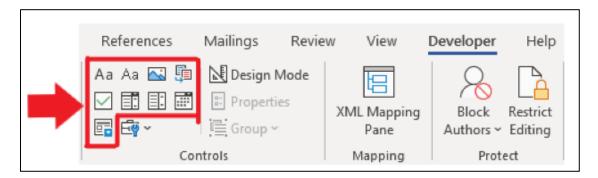
Note: *Restrict Editing* is highly recommended to use when a fillable form in Microsoft Word is created by limiting users from editing and formatting specific contents of the document. See Microsoft Support: protect document using Restrict Editing for more information.

LOCATING CONTROL CONTENTS IN MICROSOFT WORD





- 1. Navigate to the Developer tab.
- 2. In the Controls pane, select to add a control content form field.



To create fillable forms in Microsoft Word, See <u>Microsoft Support: Create forms that users</u> complete or print in Word.

LEGACY TOOLS

As mentioned previously, Legacy Forms make fillable form fields to be completed in Adobe Acrobat Pro (PDF). To convert fillable form fields from Microsoft Word to PDF, content creators must have CommonLook Office installed on their local machine. If you do not have a license for CommonLook Office, fillable form fields can be generated within Adobe Acrobat Pro (PDF).

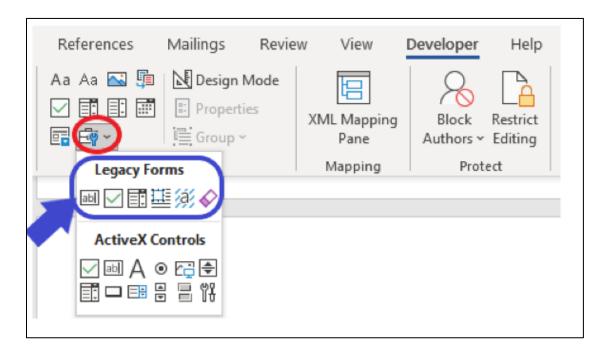
Learn how to make fillable form fields in Acrobat, see <u>UA Technology PDF Accessibility with</u> Adobe Acrobat Pro DC Forms Training video.

LOCATING LEGACY FORMS IN MICROSOFT WORD

- 1. Navigate to the Developer tab.
- 2. In the Controls pane, select to expand the Legacy Tools to add Legacy Forms.







Use **Legacy Forms** to generate form fields in Word such as text fields, check boxes, and dropdowns.

Note: ActiveX Controls forms are way more complex to use and require the use of JavaScript, which is more technical and can produce accessibility issues.

FIELD PROPERTIES

To open the field properties options:

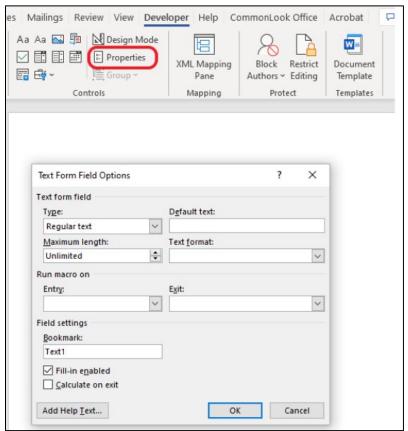
- 1. Select a form field in the document.
- 2. Navigate to the **Developer** Tab.

LONG BEACH



Bob Murphy Access Center (BMAC)Accessible Instructional Materials (AIM) Center

3. Select **Properties**.



TEXT FIELD PROPERTIES

In the Text Form Field Option, there are various options to customize such as:

- **Type**: choose a particular text format. If you want to restrict user inputs to only numbers or characters only, select a corresponding type.
- **Default text**: provide the text before the user fills out the form. This is not recommended as users will mistakenly think that the field is already filled out and possibly skip the question. Do not use Default text as label.
- Maximum length: the maximum number of characters that can be inputted.
- **Text format**: specific format that will be taken as inputs.
- Add Help Text to include tooltips for the input field.

CHECK BOX PROPERTIES

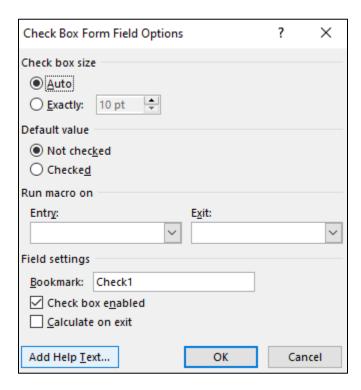




Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center

Select "Auto" for Check box size and "Not checked" for Default value.



When adding help text (tooltips), indicate the question/label before listing out the choices. Include how many choices of checkboxes there are related to a particular question. You also don't have to repeat the question being asked for the remaining checkboxes if the 1st checkbox tooltip is already provided.

Example tooltips for checkboxes:

1st checkbox: "Choose the hobbies you enjoy from the following. 1 of 6: Working in the yard."

2nd checkbox: "2 of 6: Exercise."

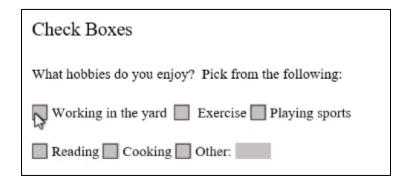
The rest of the tooltips can be auto generated using CommonLook Office (if applicable).





Bob Murphy Access Center (BMAC)

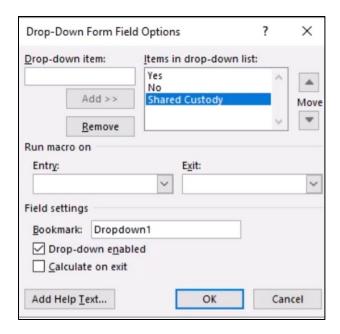
Accessible Instructional Materials (AIM) Center



DROP-DOWN PROPERTIES

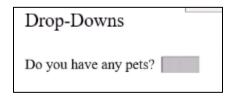
Add Drop-down item to the Items in drop-down list.

Provide the question and indicate that this is a dropdown with a list of options for tooltip.



Example tooltips for drop-down list:

"Do you have any pets? Choose from the list of options."



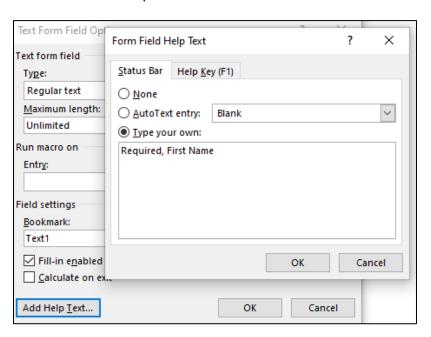




HELP TEXT/ TOOLTIPS

Tooltips allow screen readers to convey information that is being asked in the form for users to fill out the appropriate response.

Note: the screen reader will only read the Tooltips and not the label text in Focus mode, therefore, be descriptive as possible when providing tooltips. For example, if a field is required, indicate that it is required.







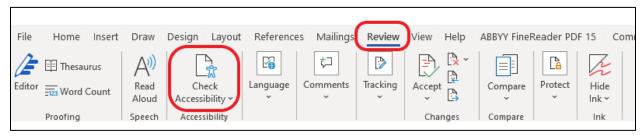
ACCESSIBILITY CHECKER

Just as the spelling checker tells you about spelling errors, Accessibility Checker in Word and PowerPoint tells you about accessibility issues in your document file, so you can fix these issues to ensure someone with a disability can read and access your content.

Please note that the Accessibility Checker does not ensure 100% accessibility. However, it is a great tool for reviewing your document for errors you could have missed.

Follow these steps to utilize the Accessibility Checker:

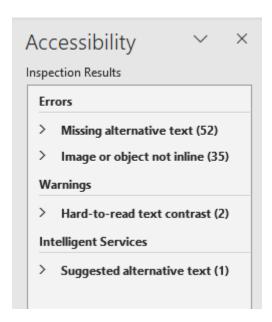
- 1. Navigate to the Review tab.
- 2. Select **Check Accessibility**. Alternatively, you can locate the Accessibility Checker on the bottom left of the document next to the word count.



- 3. The Accessibility Inspection pane will pull up on the right-hand side.
- 4. Follow the checker and make the proposed changes to ensure accessibility of your document.







SAVING WORD DOCS INTO ACCESSIBLE PDFS

The most accessible conversion from Microsoft Word into PDF is using the **PDFMaker plugin** or **Save as Adobe (PDF)**. To ensure that Microsoft Word is converting into accessible PDF:

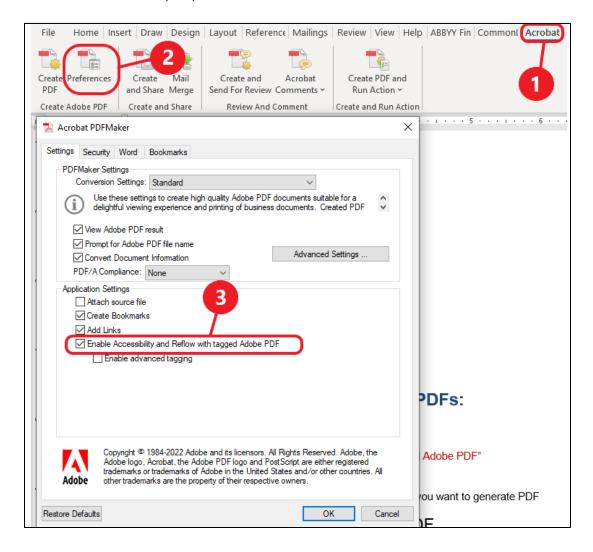
- 1. Navigate to the Acrobat Tab.
- 2. Select **Preferences**.
- 3. From the Acrobat PDFMaker menu pop-up, check box "Enable Accessibility and Reflow with tagged Adobe PDF."
- 4. Hit Ok to save preference settings.
- 5. After you have set the preferences, select **Create PDF** in the same tab, and save the file to your local computer.





Bob Murphy Access Center (BMAC)

Accessible Instructional Materials (AIM) Center



Note: Avoid saving documents using **Print to PDF** as the it removes the tag structure, making the document inaccessible.

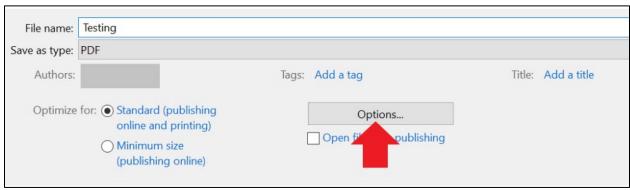
If you do not have Acrobat Plugin in Microsoft Word, save the document as PDF on your local computer by:

- 1. Navigate to the File menu.
- 2. Select Save As.
- 3. Save the document as PDF.

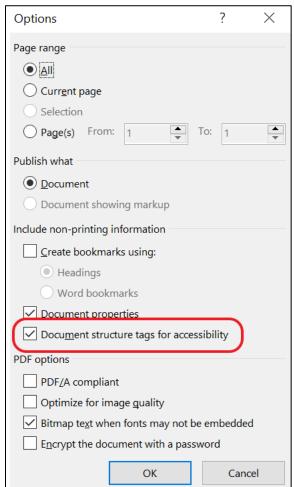




4. Select the **Options...** menu.



5. In the Options window, ensure that **Document structure tags for accessibility** is checked and press OK to save the document.







ACCESSIBILITY LAWS

SECTION 504 AND THE AMERICANS WITH DISABILITIES ACT OF 1990:

Section 504 of the Rehabilitation Act of 1973 created and extended civil rights to people with disabilities. Section 504 has provided opportunities for children and adults with disabilities in education, employment, and various other settings. It allows for reasonable accommodation such as special study areas and assistance as necessary for each student in Federal agencies. Section 504 laws were then extended through the Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008 (ADAAA) which broadened the definition of "disability" to cover both individuals with physical and mental disabilities.

SECTION 508

This amendment to Section 504 and the Americans with Disabilities Act of 1990 was enacted in 1998 to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508, agencies must give employees and members of the public with disabilities access to information comparable to that available to others. California Government Code Section 11135-11139.8 requires all agencies that receive state money to comply with Section 508, and Executive Order Number 926 requires all CSU campuses to comply with Section 508.

ACCESSIBLE TECHNOLOGY INITIATIVE (ATI)

Effective on January 1st, 2005, Chancellor Charles B. Reed enacted CSU Executive Order 926, "The CSU Board of Trustees Policy on Disability Support and

Accommodations." The intent of the Accessible Technology Initiative is to make information technology resources and services accessible to all students, employees, and guests regardless





of disability. CSULB is committed to this initiative by maintaining consistent accessibility and promoting assistive technology to students, administrators, and faculty campus wide.

THIS ISN'T JUST THE LAW

This is your chance to assist this longstanding and respected institution of learning to better serve the public with only the greatest intentions of educational and moral outcomes for the success of others.

RECAP AND FURTHER RECOMMENDATIONS:

- Assign Styles to text to build document structure.
- Use heading, subheading, and body styles to create hierarchy in your document.
- Make sure all headings are in correct order (Heading 1, Heading 2, Heading 3, etc.)
- Always use the "Bullets" or "Numbering" tools to format lists.
- Use simple language and font style.
- Use simple table structures with proper table headers.
- Create proper table of contents for long documents.
- Avoid using low contrast colors (pale or gray colors against white paper).
- Assign descriptive alternative text to your images. If an image is decorative, mark it as
 decorative.
- Label hyperlinks with simple, but accurate descriptions.
- Use Content Controls to generate form fields to be completed in Microsoft Word.
- Use Legacy Forms to generate form fields to be completed in PDF.
- Ensure all tooltips and labels are included for every form fields.
- Avoid using repeated blank [spacebar or return] characters (they will read as "blank" repeatedly by screen readers). Instead, use spacing and indentation settings to create blank spaces.





- Avoid image watermarks (they may not be understood by people with visual or cognitive disabilities).
- Run the accessibility checker to make sure you have made all appropriate changes to ensure accessibility is met.
- Avoid Print to PDF to convert Word document to PDF, instead Save as PDF with accessibility option checked.

RESOURCES

- An Introduction to Accessibility Digital.gov
- Tutorials | Web Accessibility Initiative (WAI) | W3C
- Dos and Don'ts on Designing for Accessibility
- Harvard University: Designing for Readability
- Microsoft: Make Your Word Documents Accessible to People with Disabilities
- WebAim: Alternative Text
- WebAim: Creating Accessible Documents
- WebAim: Links and Hypertext
- Microsoft Support: Create forms that users complete or print in Word
- WebAIM Converting Document to PDF
- CSULB: ATI Document Accessibility
- AIM Center: Accessibility Resources
- AIM Center Microsoft Word Accessibility Training Videos
- UA Technology Accessible Word Document Training Video
- Section 508 Create Accessible Documents Trainings
- Americans with Disabilities Act Government Homepage
- Section 504 Government Homepage
- Section 508 Government Homepage

LONG BEACH



Bob Murphy Access Center (BMAC) Accessible Instructional Materials (AIM) Center

• EO-926 / Accessible Technology Initiative Statement