



# Microsoft Word 2019 Accessibility Guide



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## Styles

### What are styles?

Many people do not use true styles in Word. For example, when creating a heading, they simply change the font, enlarge the font size, make it bold, etc. If this is done, the document has no real structure that a screen reader can discern. In Word, the correct way to provide structure is to use Word styles. This section will outline how to add and edit headings in all common versions of Word.

### Locating Styles

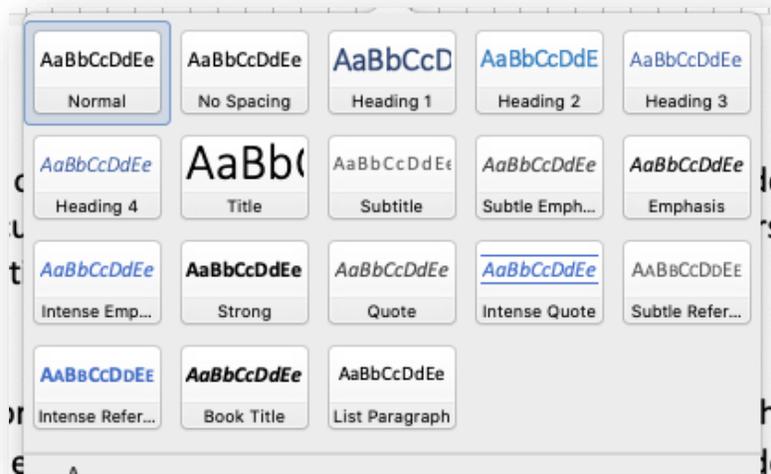
1. Highlight the desired area.
2. Select the **Home** tab.
3. Navigate to the **Change Styles** pane and browse the window for the desired style.

### Headings and Subheadings: How They Work

Headings provide structure and organization to documents. Screen reader users navigate through headings to locate different sections within the document. Headings structures need to follow an ascending order, H1 – H6. For example, the title of the document should be heading level 1, and sub sections should be heading level 2 and so forth.

How to apply headings and subheading styles to your document:

1. Highlight the desired area 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.



## Body/Normal Style

Body/Normal styles are used for the rest of your document's content under headings and subheadings. Formatting this text using the styles listed below is important for screen readers and students with learning disabilities to interpret information more efficiently.

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.

## Modifying Styles

You can make changes within the body preference to fit your needs.

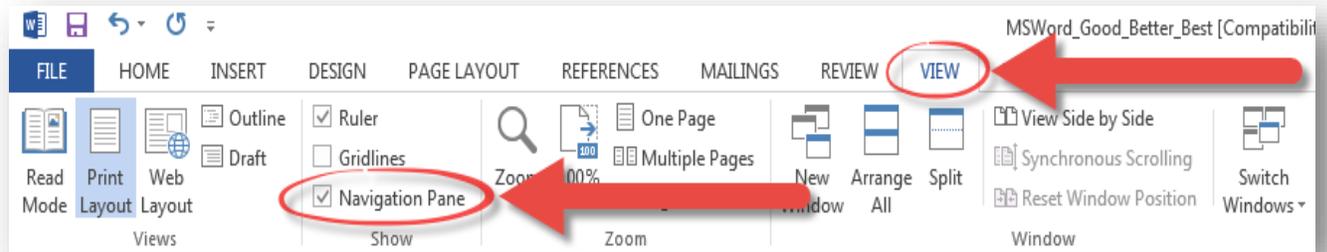
1. Click on the drop-down arrow for the style you want to modify.
2. Choose **Modify** to bring up the **Modify Style** window.

## Navigation Pane

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

To access the Navigation Window:

1. Select the "**View**" tab
2. Then click the box for "**Navigation Pan.**"
3. The Navigation Pane should appear beside your document's edit view.



## 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 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

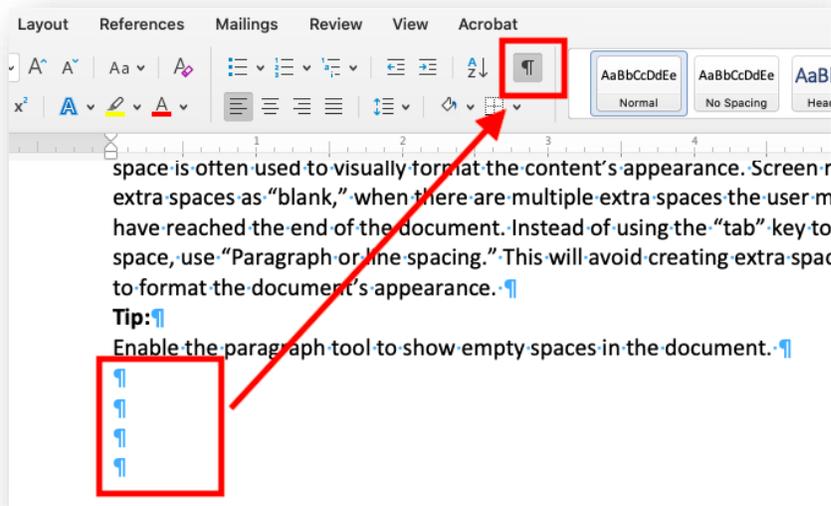
1. Navigate to the “References” tab.
2. Select the “Table of Contents” table.
3. You can customize the table of contents.

## Formatting

When designing documents, avoid creating extra space using the "tab" or "return" key. Extra space is often used to format the content's appearance visually. Screen readers will announce extra spaces as "blank." When multiple extra spaces are present, the user may assume that they have reached the document's end.

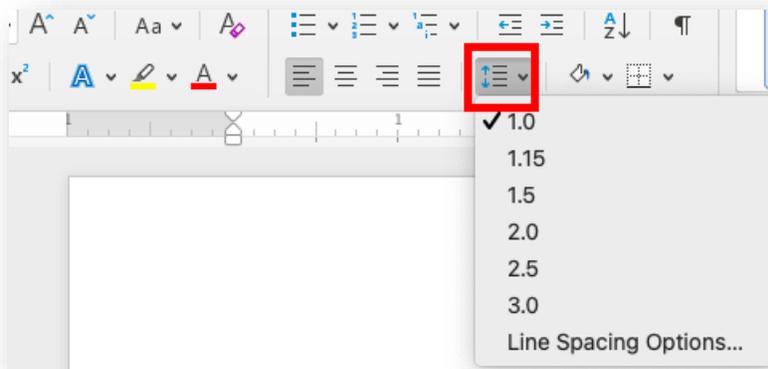
Instead of using the “tab” key to format document space, use “**Paragraph**” or “**line spacing.**” These features will avoid creating extra space while still being able to format the document’s appearance.

**Tip:** Enable the paragraph tool to show empty spaces in the document.



### How to create spacing and indentation:

1. Select the text.
2. On the **Home** tab, select **Line and Paragraph Spacing**.
3. Select **Line Spacing Options**.
4. Adjust the **Spacing and Indentation**.



## Lists

Lists are used to format information sequentially without the use of characters such as plus signs or asterisks. Always use the **Bullets** or **Numbering** tools instead of other characters for listing information. For the purposes of this tutorial, we will use the **Bullets** tool.

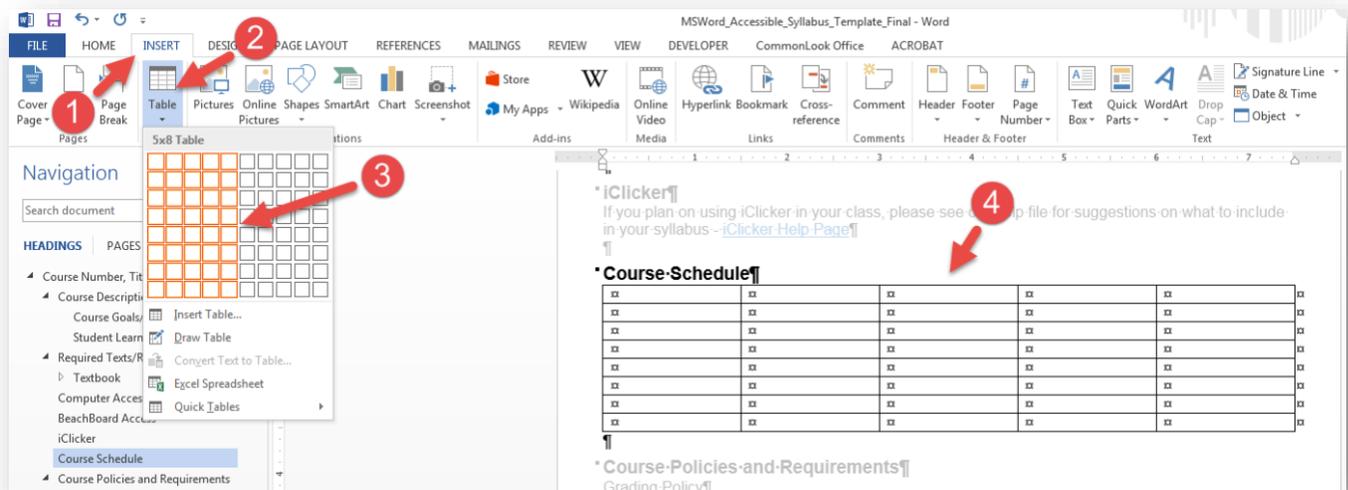
**How to create a list:**

1. Highlight the text you wish to format.
2. Make sure you are in the **Home** tab.
3. Select the **Bullets** tool pull-down for different list options.
4. Select the desired bullet style.

**Tables**

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

1. Navigate to the **Insert** tab.
2. Select the **Table** button.
3. Choose the number of rows and columns for your table.
4. After creating your table, type in the appropriate content for each row and column.
5. Add heading columns to each

**Tips for Building Tables:**

- Have clear and understandable column or row headers (week, due date, grades, topic, etc.)
- Assign header rows in the **Table Style Options**
- Avoid merging cells.
- Avoid merging multiple tables together.
- Avoid low contrast cell colors.



## Tables: Good, Better, and Best

Good! Table was built using the table tool, but has merged cells and low contrast cell backgrounds.

Course Schedule				
Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
2	September 2nd			Read Jones and Smith, Preface- Chapter 1
3	September 16th			Read Jones and Smith, Chapters 3-5
4	September 23rd			Read Jones and Smith, Chapters 6-7

Better! Merged cell has been fixed, but low contrast cell backgrounds are still there.

Course Schedule				
Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
2	September 2nd			Read Jones and Smith, Preface- Chapter 1
3	September 16th			Read Jones and Smith, Chapters 3-5
4	September 23rd			Read Jones and Smith, Chapters 6-7

Best! Table is built correctly with no merged cells or contrast issues.

### Course Schedule

Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
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4	September 23rd			Read Jones and Smith, Chapters 6-7

## Color Contrast

### What is Color Contrast?

Color is often used to make documents visually appealing and attract the reader's attention. Color contrast has to do with 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 [WebAim Contrast Checker](#), 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. Below are some good, better, and best examples of the differences between high and low contrast color combinations:



Not so good! Contrast is far too low in these cells. This text will be difficult for some readers.

Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
2	September 2nd			Read Jones and Smith, Preface- Chapter 1
3	September 16th			Read Jones and Smith, Chapters 3-5

Better! However, this could still potentially cause some issues for some readers.

Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
2	September 2nd			Read Jones and Smith, Preface- Chapter 1
3	September 16th			Read Jones and Smith, Chapters 3-5

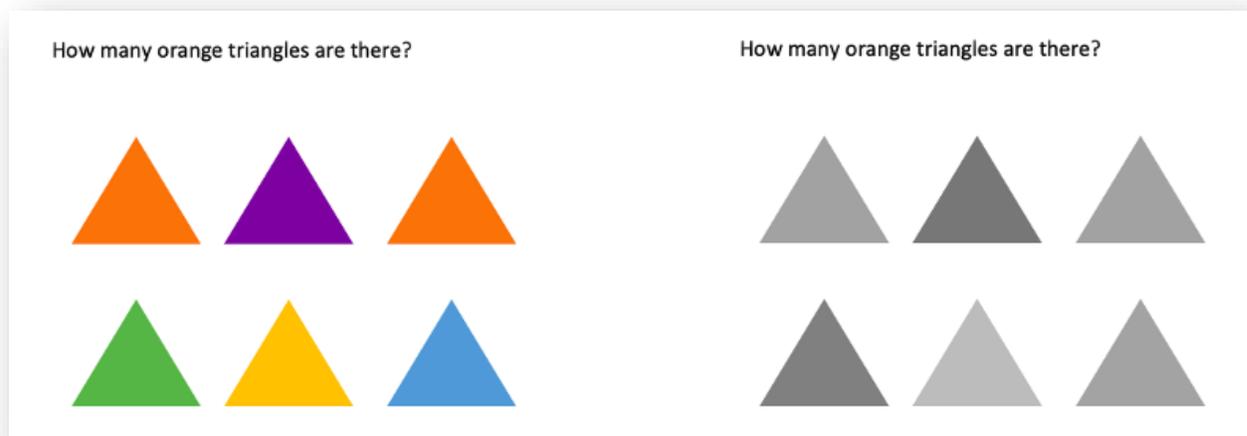
Best! These color combinations are easy on the eyes and should not cause any readers issues.

Week	Due Date	SLO	Grade	Topics, Readings, Assignments
1	August 29th			Read course syllabus and assignment rubrics
2	September 2nd			Read Jones and Smith, Preface- Chapter 1
3	September 16th			Read Jones and Smith, Chapters 3-5

## Color to Convey Information

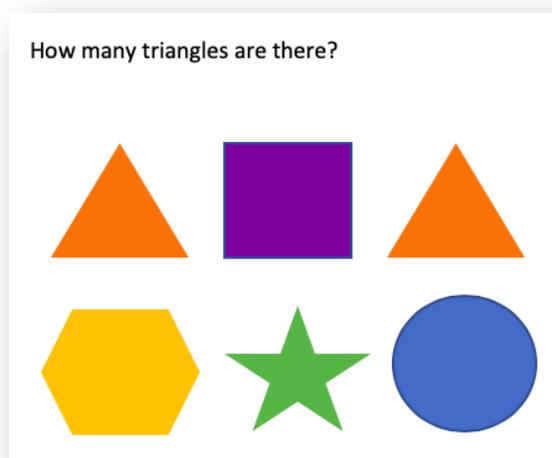
Color should not be the only method to convey information. Readers that cannot perceive color will be unable to understand the context or representation of the color. Instead, in combination with color, use different objects such as shapes to differentiate between content.

### Example:



*Figure 1 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 who cannot perceive color will view the image. They will be unable to find the number of orange triangles because they all appear the same.*



*Figure 2 This image asks, "how many triangles are there?" This question does not rely on sensory characteristics such as color to understand the context of the question.*

## Color Contrast Best Practices

- Avoid using light orange, red, and green in your template and text.
- Use texture 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.
- [Colour Contrast Analyser](#) is a free software that checks contrast accessibility for background and foreground colors using WCAG 2.1 standards.
- [Color Safe](#) develops accessible color palettes.

## Fonts:

Believe it or not, even the fonts you use can affect whether your documents are accessible. With so many devices out on the market, more operating systems are being used between desktop, laptop, tablet, and cell phones than ever before. There are, however, fonts that are used mutually across all these platforms. Below is a list of accessible fonts that are found on Windows, Mac, Chrome, Linux, and various tablet and cellphone devices.

### List of Accessible Fonts:

- Arial
- Comic Sans MS

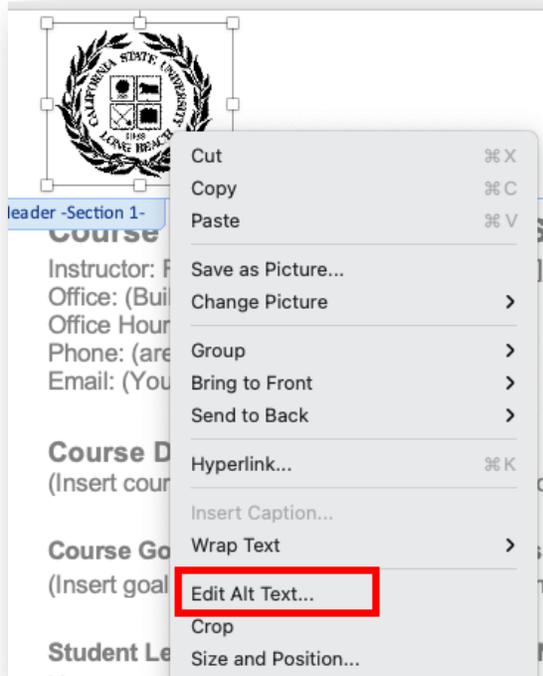
- Courier New
- Georgia
- Times New Roman
- Verdana

## Alternative Text and Images

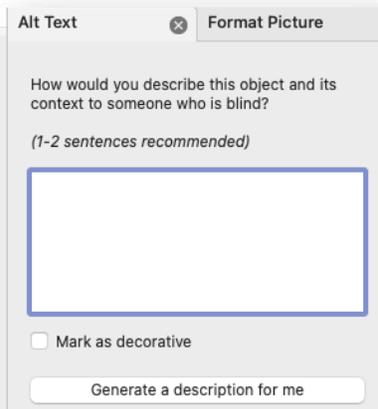
Alternative text also known as “alt text” is a brief 8 to 120-character description describing the elements of the image or what the image is conveying. Screen readers rely on alternative text to describe the image to the reader. In situations where the image is not available to the reader, perhaps because 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.

### How to add alternative text:

1. Select the desired object.
2. Right click to bring up the Context Menu and select **Edit Alt Text**.



3. Type a brief but clear description of the object in the **Alt Text** box provided.



4. Once done, select the close button.

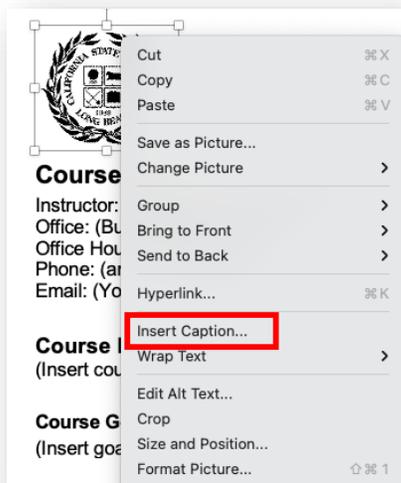
**Figure captions** are an alternative for complex images that require over a 120-character description, such as graphs and charts. Figure captions are associated with images that can be placed either above or below the image. Contrary to alt text, there is no character limit for figure captions.

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Accessible Instructional Materials (AIM) Center

**How to add figure captions:**

1. Select the desired object.
2. Right click to bring up the Context Menu and select **Insert Caption**.



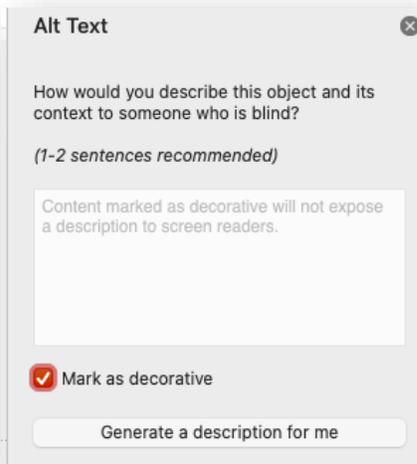
3. Insert caption and adjust the appearance of captions as desired.

**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. Right click to bring up the Context Menu and select **Edit Alt Text**.
3. Select the “**Mark as decorative**” checkbox.



## Best Practices for Alt Text

- Avoid using phrases such as “image of” or “photo of” because screen readers already announce that it’s an image.
- Avoid using images of text because assistive technology cannot convert the text within the images.
- 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 don’t convey any meaning don’t require alternative text and should either be tagged as an artifact on Adobe Acrobat or have a “Null” alternative text on Microsoft Word. Both methods ensure screen readers skip the decorative images.

## Hyperlinks

Hyperlink 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, webpage, or even within the same document.

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.” Screen reader users often navigate through links as a way 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.

## Don'ts

[Click here](#)

[Read more](#)

<https://web.csulb.edu/divisions/students/dss/aim/>

*Figure 3 The picture above shows the don'ts for creating descriptive link text. The examples shown are "Click here," "Read more," and an entire URL with no link text.*

## Do's

[Student Financial Aid](#)

[Fall 2020 Registration Guide](#)

[Accessible Instructional Materials \(AIM\) Center](#)

*Figure 4 The picture above shows the do's for creating descriptive link text. The examples shown are "Student Financial Aid," "Fall 2020 Registration Guide," and "Accessible Instructional Materials (AIM) Center." These are great examples of descriptive link because it demonstrates the purpose of the link.*

**Links must be visually different from regular text.** Links are often identified by using underline and color. However, color shouldn't 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 5 In the example above, there are no visual indicators for links such as underline and color. Readers will not know that links are present within the paragraph.*

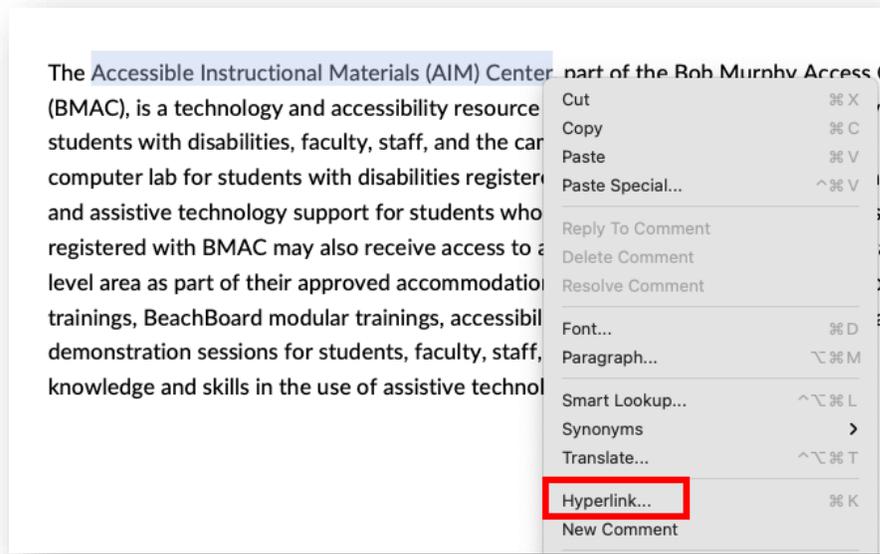
The [Bob Murphy Access Center](#) is a student support program within the [Division of Student Affairs](#). Our mission is to assist students with disabilities as they secure their university degrees at [California State University, Long Beach](#). We provide services to over 1,500 students each semester.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

*Figure 6 In this example above, the links appear visually different from regular text. The link text contains a combination of color and underline. The combination of these indicators will make the links apparent to visual readers.*

## Inserting a hyperlink within a document

This example will demonstrate how to insert a hyperlink for a document file or webpage that is located separately and outside of the document.

1. Highlight desired text.
2. Right click to bring up the Context Menu and select **Hyperlink**.



3. In the Insert Hyperlink Window select the first option “**Web Page or File**” located at the top of the pane.
4. In the **Address field** make sure that the complete URL is included and that the text corresponds with the correct URL address.
5. Click OK when done.

**Tip:** It is in best practice to avoid using the complete URL website address because it can be cumbersome to listen to when using a screen reader, especially if it is a long URL address.

## Accessibility Checker

Just as the spelling checker tells you about possible spelling errors, Accessibility Checker in Word and PowerPoint tells you about possible accessibility issues in your Office 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 insure 100% accessibility. However, it is a great tool for reviewing your document for errors you could possibly have missed.

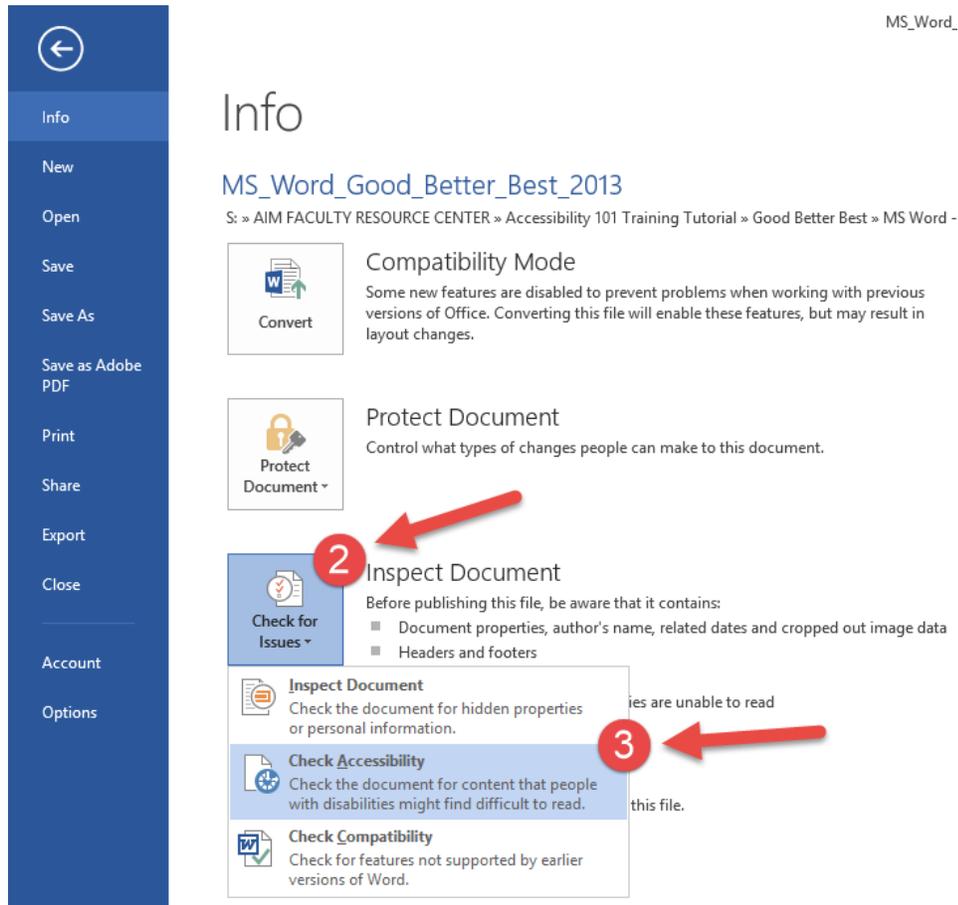
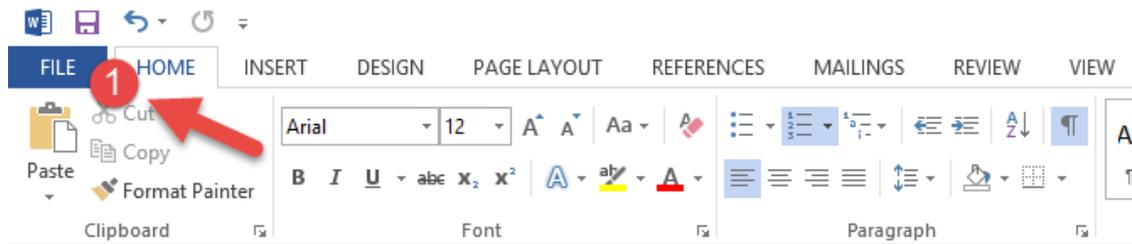
Follow these steps to utilize the Accessibility Checker:

1. Navigate to the **File** tab.
2. Under Info, select **Check for Issues**.
3. In the drop down list select **Check Accessibility**.

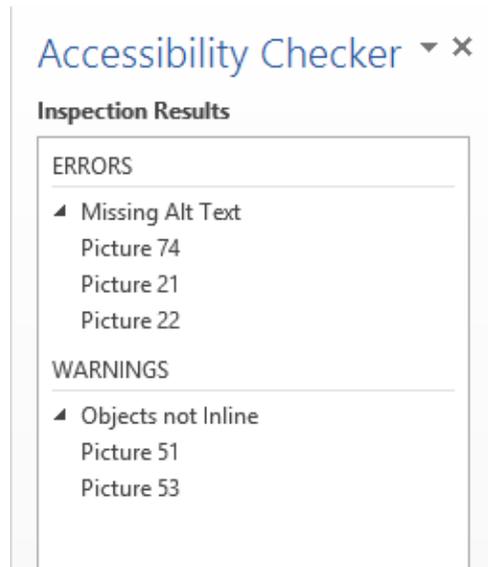


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Accessible Instructional Materials (AIM) Center



4. The **Accessibility Checker** inspection results should then appear in a column to the far right of the screen.
5. Follow the checker and make the proposed changes to ensure accessibility of your 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 accommodations 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 that is comparable to the access 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 campus' to comply with Section 508.

### **Accessible Technology Initiative (ATI):**

Effective on January 1<sup>st</sup>, 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 the implementation of 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 hierarchy
- Use heading, subheading, and body styles to create hierarchy in your document. Make sure all headings are in correct order (Title > Heading 1 > Heading 2, etc.)
- Always use the "Bullets" or "Numbering" tools to make lists
- Use simple table structures
- Avoid using low contrast colors (pale or gray colors against white paper)
- Assign alternative text to your images
- Label hyperlinks with simple, but accurate descriptions
- Avoid using repeated blank [spacebar or return] characters (they will read as "blank" repeatedly by screen readers)
- 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 insure accessibility is met



## Resources

- [Do's 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](#)
- [CSULB: Document Accessibility](#)
- [AIM Center: Accessibility Resources](#)
- [Microsoft Word Accessibility Training Videos](#)
- [Americans with Disabilities Act Government Homepage](#)
- [Section 504 Government Homepage](#)
- [Section 508 Government Homepage](#)
- [EO-926 / Accessible Technology Initiative Statement](#)