CREATING ACCESSIBLE DOCUMENTS AND MEDIA (2023)

Contents

Microsoft Word Documents

General tips

- Use Word's built-in formatting styles to create headings, page numbers, columns, tables, footnotes, and bulleted/numbered lists. Formatting styles help users using screen readers to navigate through a text. Headings should be formatted hierarchically by Heading 1, Heading 2, and so on.

- Use fonts that are at least 12 points in size.

- Use sufficient contrast for text and background colors.

- Use web-safe fonts such as Verdana, Arial, Tahoma, Helvetica, Calibri and Times New Roman. Web-safe fonts such as these render correctly in both Mac and Windows platforms.

- Avoid using text boxes.

- Make sure to include a header row when making a table.

- Ensure that color is not the only means of conveying information.

- Include alt text for all images, graphics, charts or graphs that are informational. Screen readers read out alt text for users who are visually impaired.

- Meaningful text should be used when creating hyperlinks. (If the document is meant for print, include the whole URL.)

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Heading Styles

Instead of bolding or underlining text to indicate different sections of a document, use heading styles instead. Heading styles enable students using screen readers to jump to different parts of a document without the screen reader having to read through the entire text.

Using Heading Styles in New Documents

1. Click the **File** tab, select **New > Blank Document**.

2. Go ahead and type your document, switching between heading styles (Home tab > Styles) when you type a heading, and **Normal** when you type body text.

3. You can also choose from other types of styles by expanding the **Styles** panel.
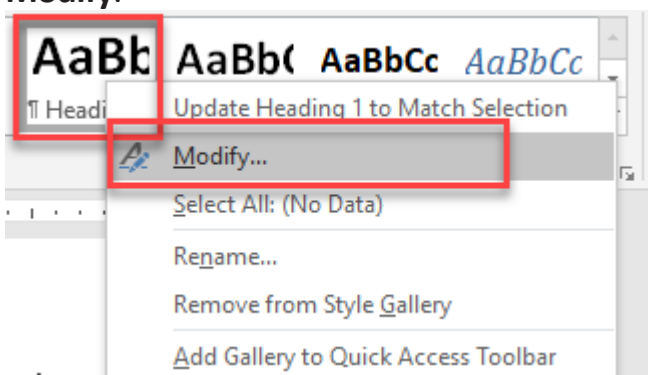
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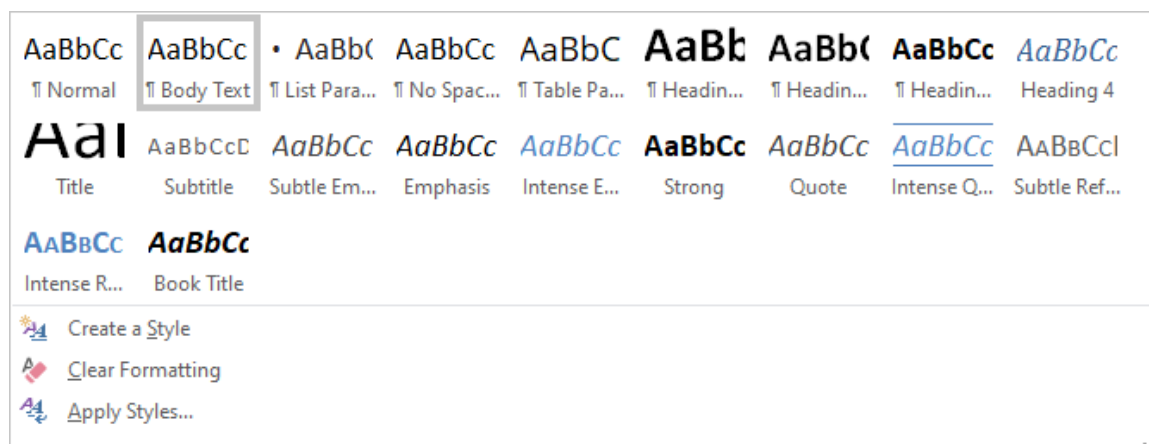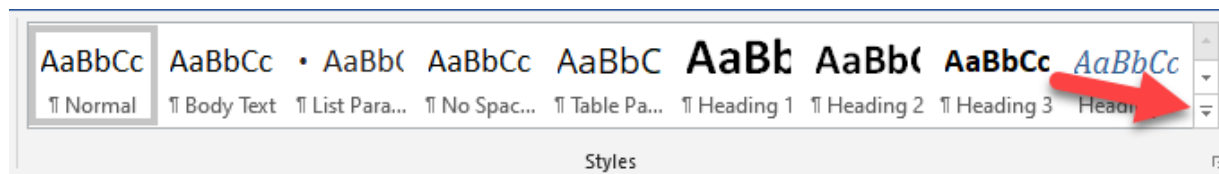
## Applying Heading Styles to Existing Documents

1. Open the document to which you would like to add heading styles.

2. Highlight the text.

3. Click on the style you would like to apply to the text.

Creating Custom Heading Styles

1. To modify a heading style, right-click the style in the **Styles** toolbar, then select **Modify**.


2. To create your own style, expand the **Styles** toolbar by clicking on the last arrow in the scroll bar, and select **Create a Style**.

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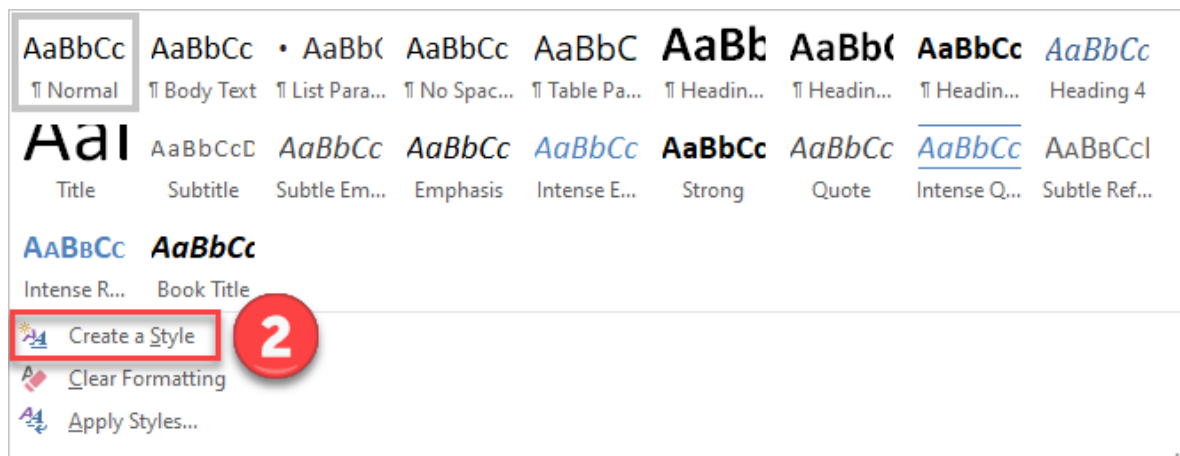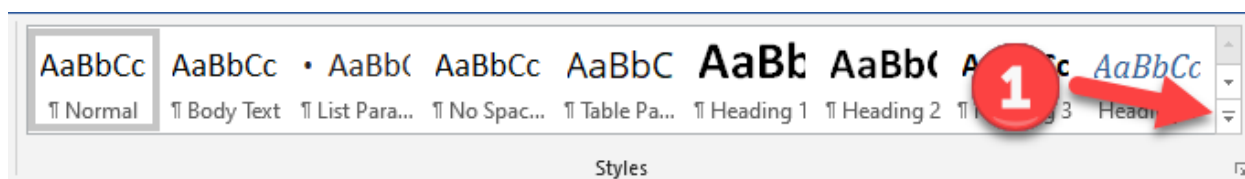
Troubleshooting Heading Styles

If you are finding that a heading style is not "taking," or that the text is reverting back to the previous formatting after apply the style, try to clear the formatting and try again.

1. To clear formatting, first highlight the text, and then click on the second down-arrow in the **Styles** panel.
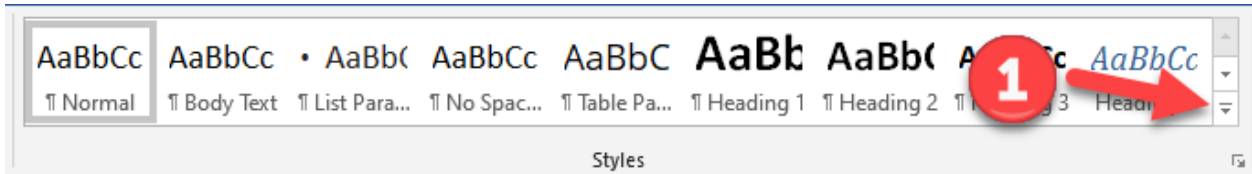

2. Next, click on **Clear Formatting**.
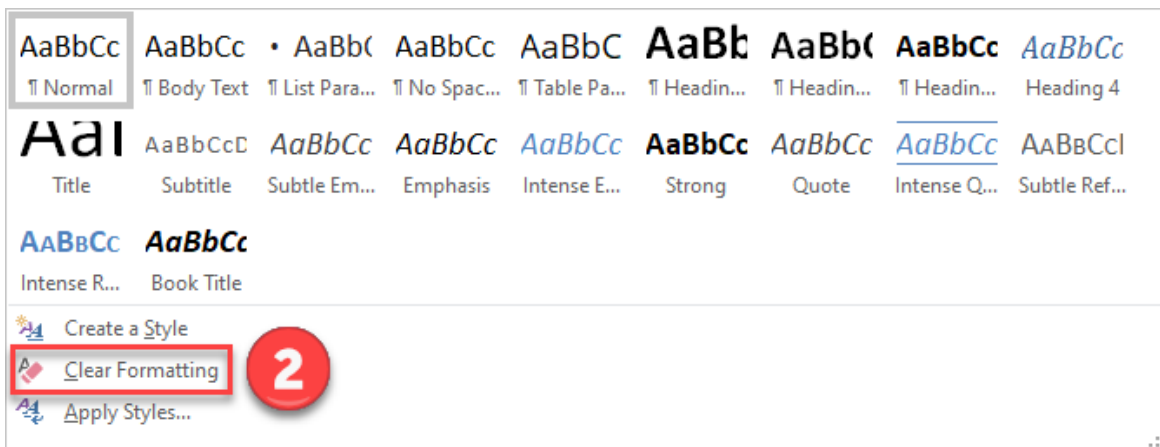
3. Try to apply the style to the text again.

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Using the Microsoft Office Accessibility Checker

The Accessibility Checker in Word, Excel, and PowerPoint can help identify possible accessibility issues in a document. The instructions below apply to Office 2010 and newer.

1. Open a document in Microsoft Word and go to **File > Info**.
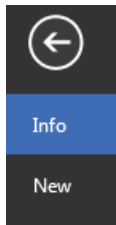
2. If the Accessibility Checker sees any potential issues, you will see a message next to the **Check for Issues** button.
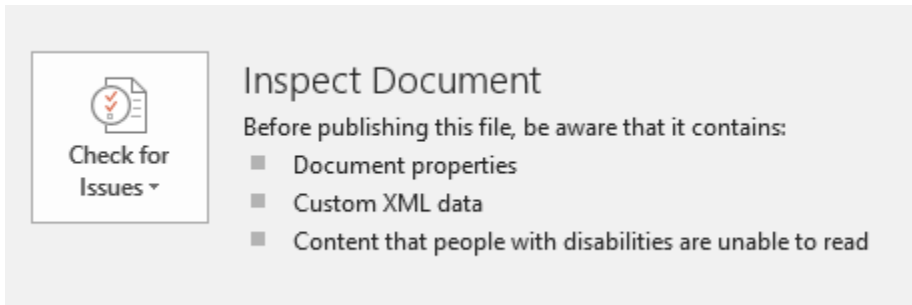
3. To view and repair the issues in your file, click **Check for Issues > Check Accessibility**.

4. Your file will reappear and the Accessibility Checker task pane will show the inspection results.
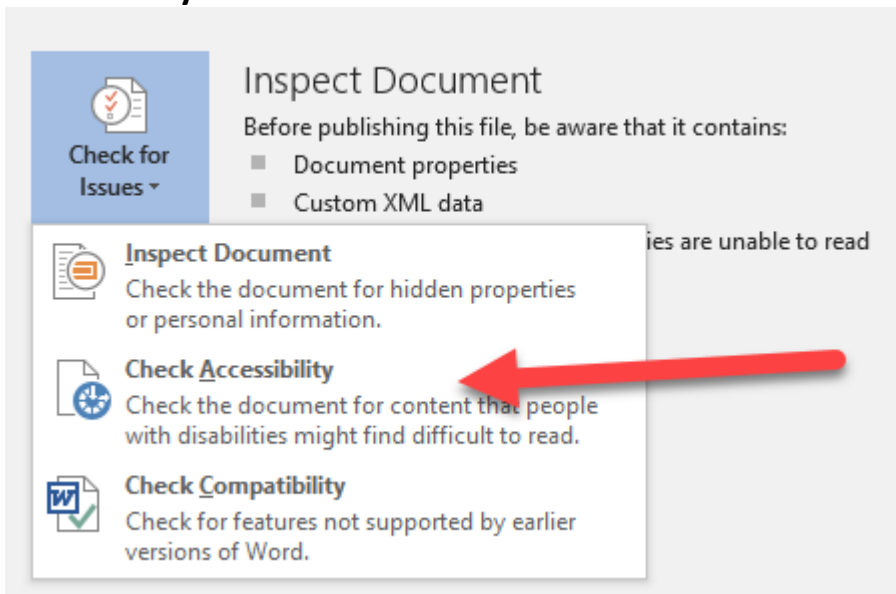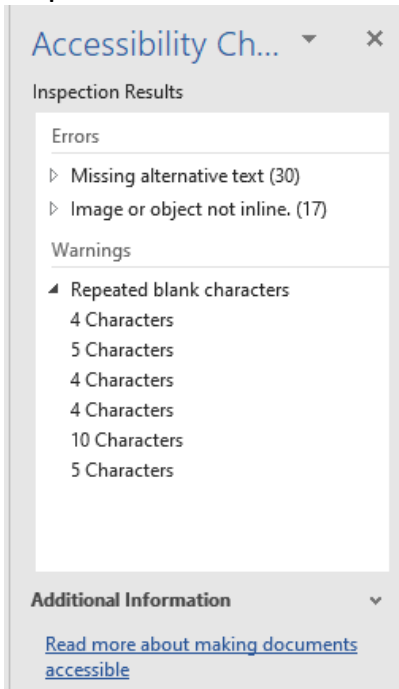

Accessibility Ch...

Inspection Results

Errors

▷ Missing alternative text (30)
▷ Image or object not inline. (17)

Warnings

◢ Repeated blank characters
   4 Characters
   5 Characters
   4 Characters
   4 Characters
   10 Characters
   5 Characters

Additional Information ⌄

Read more about making documents accessible

5. Click a specific issue to see additional information and steps you can take to edit the content.

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Creating Accessible PDFs from Word Documents

When creating PDFs from Word documents, first make sure that you have followed the guidelines for Word document accessibility. Next, you will need to save the Word document as a "tagged" PDF. These directions will explain how this is done.

1. Click the **File** tab and then click **Save As**. Next, browse to the location you want the file to be saved.
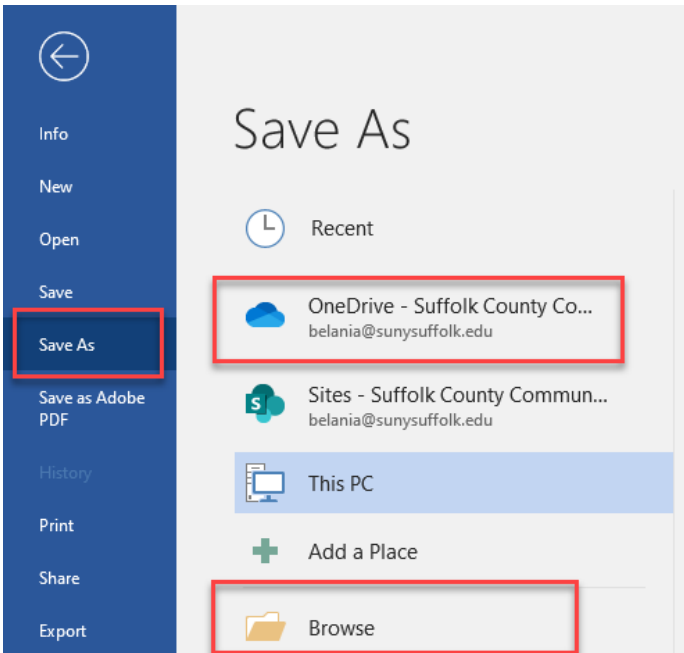
2. In the **Save As** dialog box, click the arrow in the **Save as type** list and then choose **PDF**. Next, select **Options**.
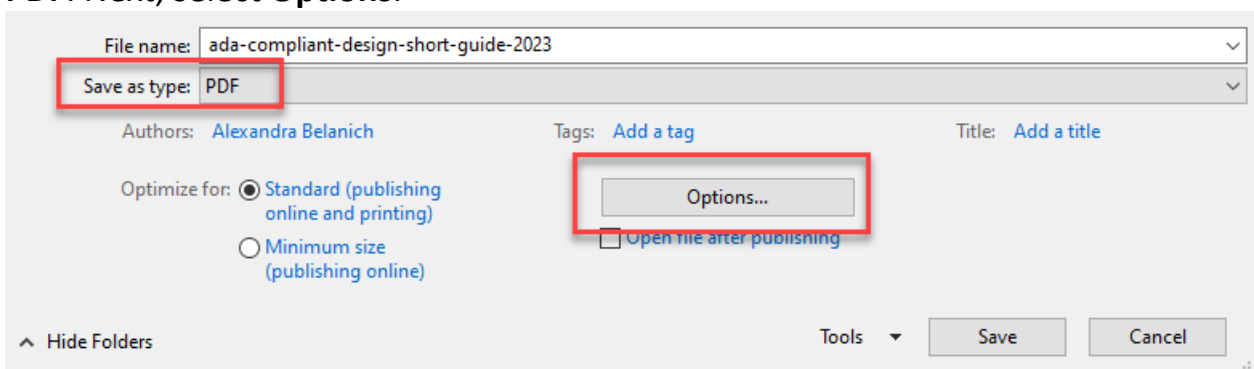
3. In the dialog box that opens make sure that **Document structure tags for accessibility** check box is selected, then click **OK**.

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4. Click Ok and Save.

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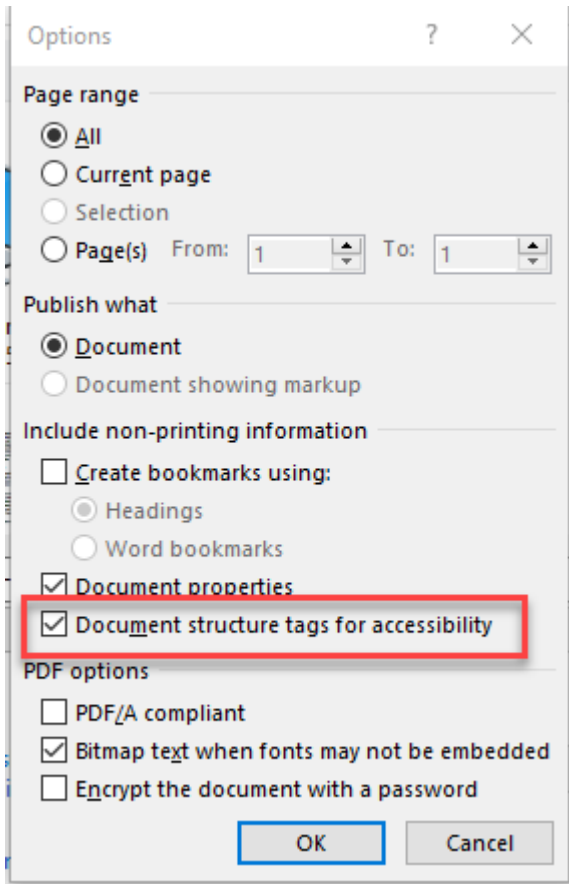
PowerPoint Presentations

When creating accessible PowerPoint presentations, it's very important to establish the correct reading order of elements on the slides. Follow the tips below to ensure that your slides are accessible.

- Use PowerPoint's preset slide layouts instead of inserting text boxes and media manually. The preset slide layouts ensure that the content is arranged in reading order.

  - Please note: Text boxes may be used; however, they must be inserted into the slide in reading order. To make sure the reading order is correct, check the order of the text boxes (or any other elements) in the Selection panel. Elements can be reordered within this panel

- Use a font at least 18 points in size.

- Use sufficient contrast for background and text colors.

- Avoid blinking or flashing animations.

- Apply alt text to any essential images or graphics.

- Do not set embedded videos to autoplay.

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Videos

In order for a video to be accessible, it must contain captions, and if needed, audio description (see page 15).
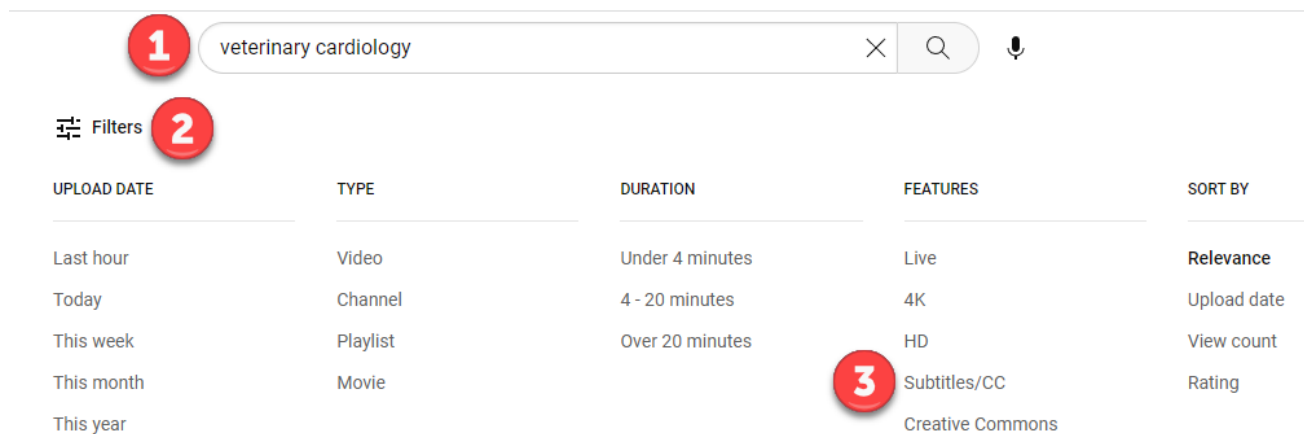
General Captioning Guidelines

- Captions must relay the speaker's exact words with correct spelling, punctuation, and grammar with 99% accuracy and no paraphrasing. Captions must honor the original tone and intent of the speaker. Captions must match background noises and other sounds to the fullest extent possible.

- Time Synchronization: Captions must align with their corresponding spoken words and sounds to the greatest extent possible. Captions must not proceed too quickly for the viewer to read.

- Program Completeness: Captions must be included from the beginning to the end of the program to the fullest extent possible.

- Placement: Captions must be positioned on the screen without blocking important content. Font size should be reasonably legible.

From https://www.3playmedia.com/blog/us-laws-video-accessibility/

Searching for Closed Captioned Videos on YouTube

YouTube contains a wealth of educational content; however, auto-generated captions may not be accurate. To find videos on YouTube that were manually captioned or edited by the content creator, use the directions below. *Please note: Currently, YouTube does not have audio description (see page 15) capability. Keep this in mind when choosing videos to use for your courses.*

2. Enter your search word or phrase in the YouTube search text box (1), click on **Filters** (2), then click on **Subtitles** (3).

3. A list of videos will manually-created or edited captions will appear. These videos will have "**CC**" under the video description. Outside of the search listing, videos with CC (with an underline under it) in the video player indicate videos with manually inputted captions.

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Using YouTube to Create Captions

YouTube can be used to create captions for existing videos. Even if you don't want to host the videos on YouTube, you can download the caption files for use in other applications, such as Camtasia. You will need to create a YouTube account, or, if you have a Gmail account, you can use the YouTube account associated with it.

1. Log into your YouTube channel. Click on the round profile avatar at the top right of the page and then click on **YouTube Studio**.
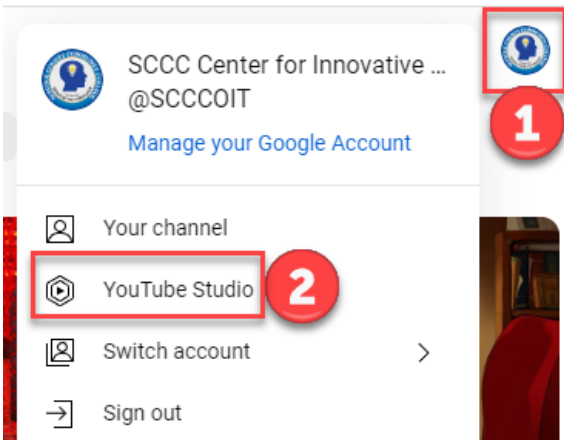
2. Next, in the menu on the left, click on **Subtitles**.

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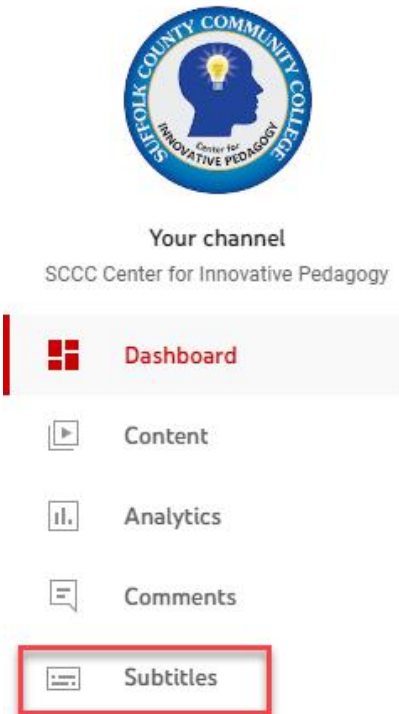
3. Find your video on the list in the center of the page and click on the video title.
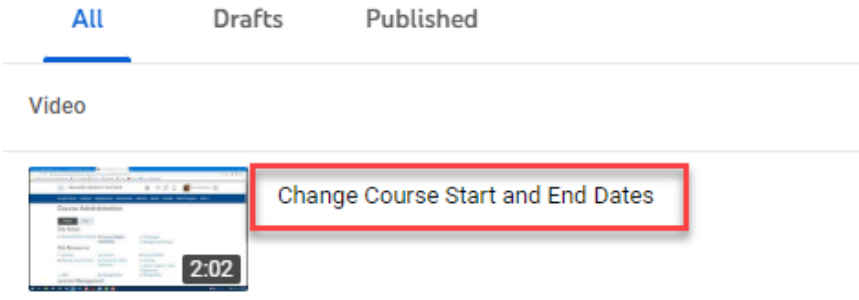
4. Next, click on **Duplicate and Edit**. (If a dialog box opens asking if you want to override your English draft, click on Continue.)

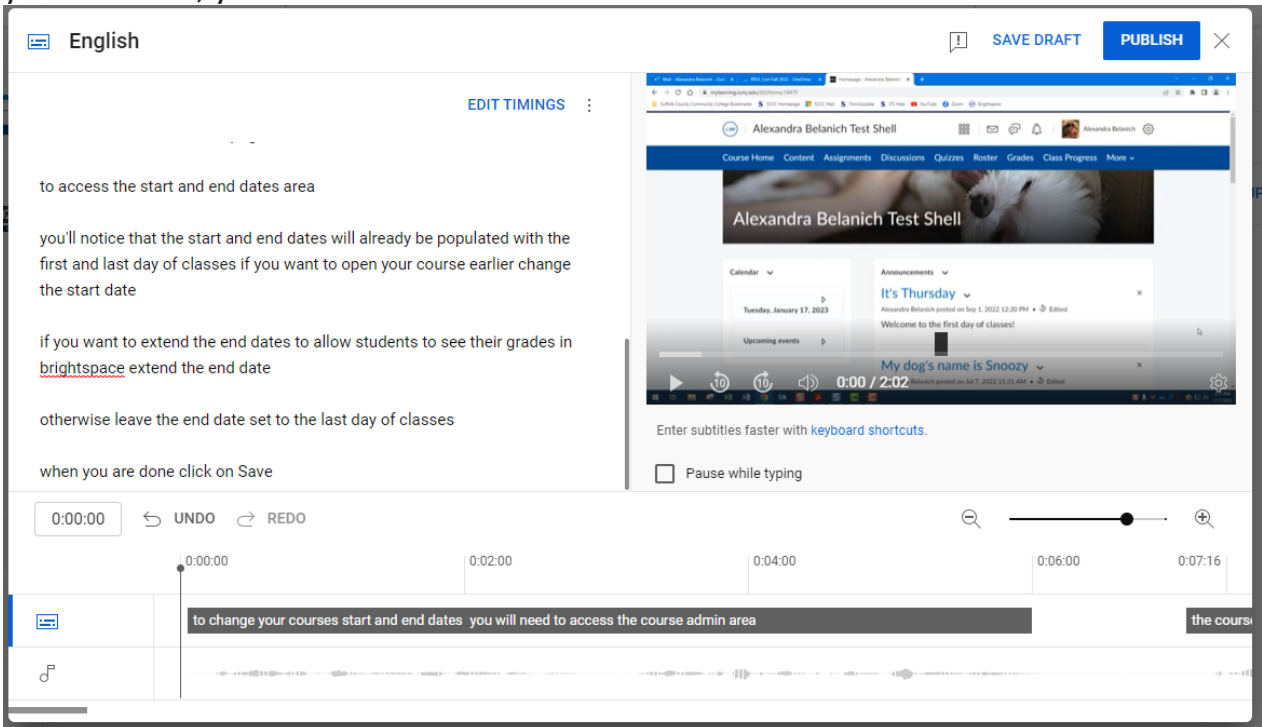5. The next page that opens will allow you to edit your captions and the timing. When you are done, you can hit **Save Draft** or **Publish**.

Audio Description

Depending upon a video's content, users with visual impairments might not be able to understand what is happening in a video by captions alone. Audio description is a voiceover track that describes the action taking place in a video when it is purely visual. For example, a video of a magician performing a trick might not be understandable to someone who cannot visualize the trick being performed. Audio description would describe what the magician is doing, step by step.

YouTube does not currently support audio description. However, YouDescribe, a project created by Dr. Joshua Miele at The Smith-Kettlewell Eye Research Institute, enables users to create audio descriptions for their own and others' YouTube videos. YouDescribe is free to use.

For more information about YouDescribe, please see
https://youdescribe.org/support/tutorial.

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Creating Captions Manually or with Camtasia

Creating your own captions can be time-consuming. Below are some tips that might help make the process quicker.

When Creating Your Own Videos

- After creating a PowerPoint presentation, use Camtasia to record your narration instead of PowerPoint. Use the voice training feature to enable Camtasia to create more accurate captions from your voice. ***Please note:*** *Captions autogenerated by Camtasia are usually not accurate because it takes at least 4-5 hours of voice training for the system to learn your voice. It might be easier and faster to allow YouTube to caption your videos, or to use other third-party solutions.*

- If you are not narrating your presentation on-the-fly, write up a transcript. You can then upload the transcript to Camtasia and synch it to the audio.

- The same process should be followed after creating a video by recording the screen.

When Creating Captions for Existing Narration

- If you have a transcript, upload the transcript and synch it to the audio.

- If you do not have a transcript, use YouTube to create the captions (see page 13) and then import the caption file into Camtasia.

- Type in captions manually, line by line.

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Math

Creating math content that is accessible presents unique challenges. Currently, MathML is the programming language that is used to write math equations that are accessible. Equations that is written without using MathML will not be read correctly by screen readers. MathType is a plugin that can be used in Word to write equations and to export content as a webpage.

Guidelines for Accessible Math

- Allow all expressions to be enlarged on screen.

- Ensure that users with visual impairments can read scientific and mathematical expressions and that users with visual impairments and with physical impairments can write expressions.

- Use MathML to provide access to scientific and mathematical expressions.

- Use LaTeX to provide access to scientific and mathematical expressions.

- Use prerecorded audio to read static scientific and mathematical expressions.

- Use concatenated speech strings for simple scientific and mathematical expressions.

- Create scientific and mathematical expressions scripts using guidelines for spoken mathematics.

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Brightspace

In addition to your documents and media being accessible, your Brightspace course also needs to be compliant.

1. Adjust your settings so that your default font size is 20 pixels or larger. The font size in Brightspace is calculated in pixels (px), not points. Thus, typing in a 12px font will be too small.
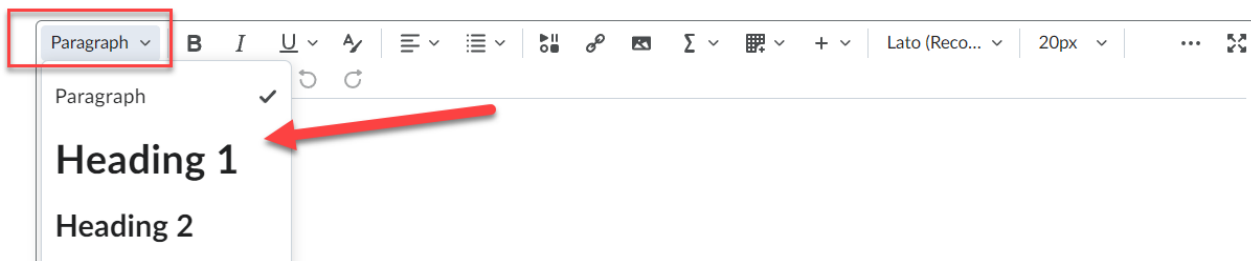
   To change your course-wide font settings, go to any content area and click on the **Settings** gear.
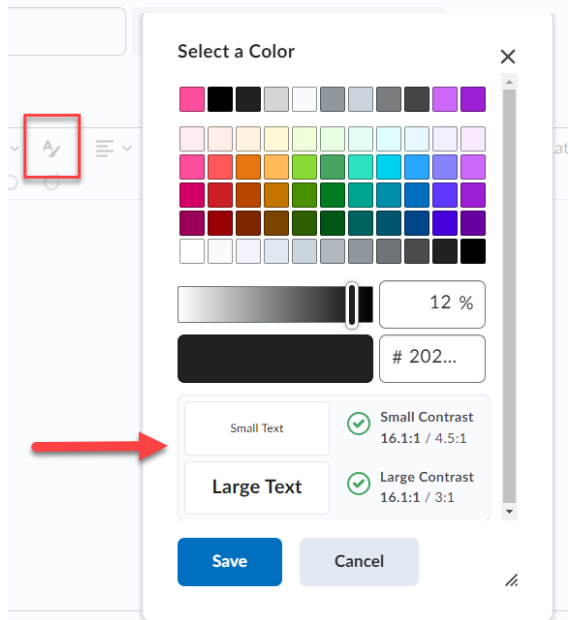

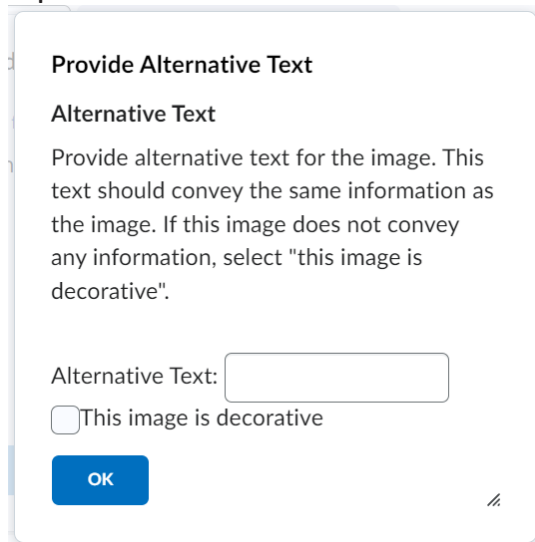   Next, scroll down the dialog box and select 20 pixels as the default font size.
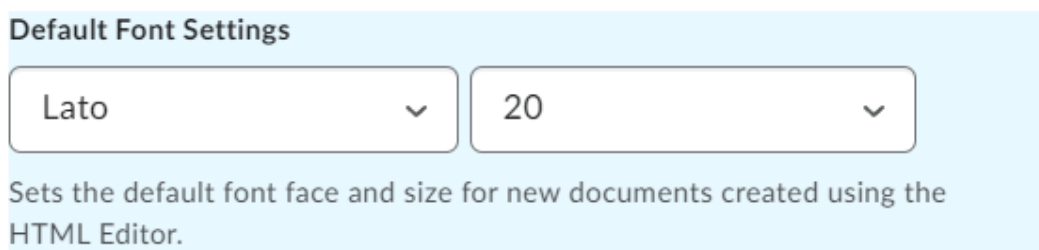
2. Use headings styles when typing in the HTML editor.

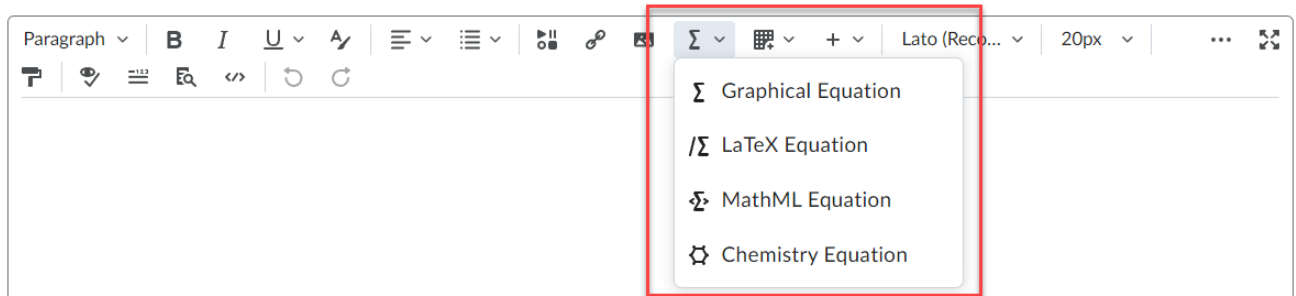3. Make sure to choose font colors that have enough contrast for the page background and the size of the text.

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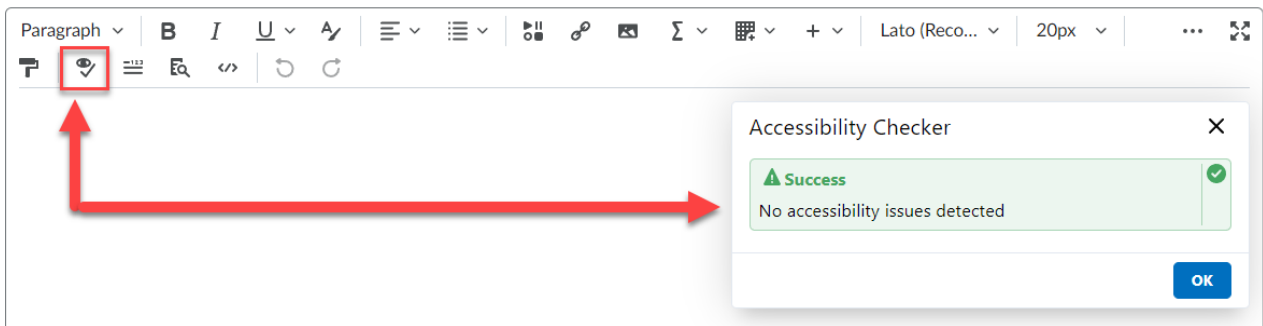4. Input alt text as needed when inserting images.

5. In the HTML editor, use the math and science input panel to write out equations and scientific notation.

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6. In the HTML editor, use the accessibility checker to double-check for issues.

7. [Add an Ally course report](#) to your course to check for course-wide accessibility issues.

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References

Eggert, E., Abou-Zahra, S., Vanderheiden, G., Guarino Reid, L., Caldwell, B., Lawton Henry, S., & Lemon, G. (2018, June 6). How to meet WCAG 2 (Quick Reference). Retrieved June 6, 2018, from https://www.w3.org/WAI/WCAG21/quickref/

Federal Communications Commission. (2021, January 27). Closed Captioning on Television. Retrieved 2023, from https://www.fcc.gov/consumers/guides/closed-captioning-television

Klein, Rebecca. (2021, October). US Laws for Video Accessibility. Retrieved 2023, from https://www.3playmedia.com/blog/us-laws-video-accessibility/

Microsoft. Make your Word documents accessible to people with disabilities. Retrieved 2023, from https://support.microsoft.com/en-us/office/make-your-word-documents-accessible-to-people-with-disabilities-d9bf3683-87ac-47ea-b91a-78dcacb3c66d

National Center for Accessible Media. (2009). Accessible Digital Media Guidelines. Retrieved November 13, 2018, from http://ncamftp.wgbh.org/ncam-old-site/invent_build/web_multimedia/accessible-digital-media-guide/guideline-g-math.html

Suffolk County Community College. (n.d.). Website accessibility policy. Retrieved 2018, from https://www.sunysuffolk.edu/accessibility/website-%20accessibility-policy.jsp

U.S. General Services Administration. (2018, May). Create accessible documents. Retrieved 2018, from https://section508.gov/create/documents

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