# Digital Accessibility Checklist for Commonly Used Programs

## Before you Get Started

A great first step is to run an accessibility checker. While no automated accessibility checker will ensure your documents are accessible, these tools can help you quickly and easily improve accessibility, so you have fewer issues to manually fix.

### Built-In Accessibility Checkers

Many programs, and all the programs listed here, have built-in accessibility checkers. When an accessibility checker is available, start by opening the file in the desktop app, if one is available, and run the checker. For some programs, the accessibility checker in the web version will miss some issues.

### **Ally**

You can also check the accessibility of content in your Canvas course using Ally, an accessibility checker program in Canvas. It will assess PDF, Word, PowerPoint, HTML, and image files located in Canvas and content created in Canvas using the rich content editor. **It** **will not evaluate** items that have been embedded or linked within Canvas pages (for example, using OneDrive or Google Docs links), so that content should be assessed manually. To get started, view the [Ally Instructor Quick Start Guide](https://help.blackboard.com/Ally/Ally_for_LMS/Instructor/Quick_Start) and check out this [two-minute video on YouTube](https://www.youtube.com/watch?v=ljqOwhd1xtU).

**For more detailed guidance on how to implement each of the items below see the** [Quick Guide to Making Your Courses Title II Complaint.](https://canvas.unl.edu/courses/120076/pages/quick-guide-to-making-your-courses-title-ii-compliant)

## Common Accessibility Features Across Programs

Many accessibility features are the same regardless of what type of document you are creating or remediating. The basic accessibility components are called LISTS, an acronym for Links, Images, Structure, Tables, and Supplements. This checklist outlines the specific items that need to be completed for each component. Following this checklist are additional guidelines that are specific to particular programs.

For each item, the relevant [WCAG 2.1 AA standard](https://www.w3.org/TR/WCAG21/) is indicated. Items with no standard are best practices that are not specified in the WCAG standards. This [WCAG in Plain English Guide](https://aaardvarkaccessibility.com/wcag-plain-english/) explains each standard in more depth. To meet these requirements, the answer to all the following questions should be **"yes”**.

### Links

Are all URLs given as hyperlinks embedded in meaningful text that clearly indicates the link’s purpose or destination? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/); [2.4.4](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-4-link-purpose-in-context/)

The full URL should not be given. Avoid links that include verbs or verb phrases like “click here” or “go here for more information”. Email addresses can be written out (i.e., iteach2@unl.edu).

Is underlining used only for hyperlinks and not for other textual emphasis?

To emphasize text, bold the text.

### Images

Do all images either have alternative text giving an accurate and concise description **or** have a ‘decorative image’ designation if the image is non-informative? [1.1.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-1-1-non-text-content/)

If the image has alt text of something non-descriptive like the file name, the accessibility checker will not flag the image. This means you need to examine the alt text for all images, not just those flagged by the checker.

See this guide for more information on [how to write good alt text](https://canvas.unl.edu/courses/120076/pages/stem-alt-text).

Are equivalent alternatives to complex images like graphs and infographics provided? [1.1.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-1-1-non-text-content/)

The accessibility checker will only tell you if alt text is missing entirely; it will not tell you whether the alt text is a sufficient description. Complex images should have a short description in alt text **and** a longer description, which can be a description on the slide, a caption, a link, or in the notes area.

See this guide for more information on [how to write good long descriptions](https://canvas.unl.edu/courses/120076/pages/stem-long-descriptions).

Do charts contain axis labels, legends, titles, and alt text? [1.1.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-1-1-non-text-content/)

Alt text should describe the type of chart and what it demonstrates. For complex charts, a [long description](https://canvas.unl.edu/courses/120076/pages/stem-long-descriptions) might also be needed.

Consider changing the colors of the chart elements so they have a high color contrast. Online color contrast checkers, such as [WebAIM's contrast checker](https://webaim.org/resources/contrastchecker), can help. You should also add a secondary element such as patterning so the elements can be distinguished without relying on color.

When elements of the chart are touching (such as bars or pieces of a pie chart), a line in a different color between the elements helps visually distinguish between them.

Is text presented as text rather than an image including text? The only exception to this is when the text is part of a logo or other branding. [1.4.5](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-5-images-of-text/)

To fix this issue, the image should be replaced by text rather than adding alt text to the image.

If the image is a logo, give that information in the alt text.

### Structure

Does each document have a unique title that tells the reader a general description of the content of the document? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/)

In most programs, you can give the title either at the beginning of the document or in the document properties. The file name is not considered a title.

Was a descriptive heading structure added to the document using the “Styles” feature with headings in order and no heading levels skipped? (Not used in Excel or PowerPoint) [1.3.1;](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/) [2.4.6](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-6-headings-and-labels/)

Headings should describe the content in that section.

The accessibility checker will only tell you if Styles are used and if heading levels are skipped but will not tell you if the appropriate heading levels were used.

Are all lists created using the numbered or bulleted list feature (Not used in Excel)? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/); [1.3.2](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/)

Is the majority of text left-aligned if the text is in English? For other languages, the text should be aligned based on the norms for that language. [1.4.8](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-8-visual-presentation/)

Is center aligned used only for short pieces of text such as headings, quotes, or invitations? [1.4.8](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-8-visual-presentation/)

Does the document avoid using full justification of text? (Not used in Canvas) [1.4.8](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-8-visual-presentation/)

### Tables

Are tables formatted as tables rather than pictures? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/); [1.4.5](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-5-images-of-text/)

Do all tables have a title and/or a caption (alt text in some programs)? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/)

Do all tables have headers? Are all column headings unique? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/); [1.3.2](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/)

Do tables avoid using merged cells? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/)

Are tables only used to organize data with a logical relationship rather than being used for layout structure or organization? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/)

Format tables so that the first (header) row and the first column (if applicable) contain meaningful labels, and each cell’s content depends on the intersection of those labels. If the table is just used for layout or organization, then table formatting should not be used.

See this guide for more information on determining [appropriate vs inappropriate use of tables](https://canvas.unl.edu/courses/120076/pages/examples-of-data-vs-formatting-tables).

Do tables avoid having any empty data cells? [1.3.2](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/)

In empty cells, put a dash or write NA, no data, not applicable, or no value. If you do not want sighted users to see it, you can change the text in the cell to the same color as the background.

### Supplements

Are the font type and size adjustable (i.e., is the file editable and not ‘read-only’)? [1.4.4](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-4-resize-text/); [1.4.8](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-8-visual-presentation/); [1.4.12](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-12-text-spacing/)

Is the correct language set for the document? [3.1.1](https://aaardvarkaccessibility.com/wcag-plain-english/3-1-1-language-of-page/)

The program may default to English or will detect the language used. If the correct language is consistently being used in a program, you do not need to check this each time you create a document.

Is there sufficient color contrast? [1.4.3](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-3-contrast-minimum/); [1.4.11](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-11-non-text-contrast/)

If you plan to use colors within your content, be sure there is sufficient contrast between text colors and background colors, as well as within visual elements such as images and graphs.

Text must have a contrast ratio of at least 4.5 to 1. Large text can be a 3 to 1 ratio if it’s over 24px, or bold and over 19px.

Usable components like form fields and buttons, and graphics like pie charts and line graphs must have a ratio of 3 to 1.

The accessibility checker does not necessarily catch all color contrast issues. Online color contrast checkers, such as [WebAIM's contrast checker,](https://webaim.org/resources/contrastchecker/) can help you determine whether there is sufficient contrast.

1. Is any information or navigation (such as grouping, importance, directionality, etc.) conveyed by visual cues (i.e., color, size, font, position, grouping, shape) also communicated in another non-visual way? [1.3.1;](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/) [1.4.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-4-1-use-of-color/)
   * If text needs to be emphasized, is it bolded rather than relying solely on visual formatting such as color or font?
   * When color is used to convey information, is there another non-visual method to convey that information (such as text, which can be read by a screen reader)?
   * If spatial relationships between pictures or shapes communicate information, is this information included in another non-visual form (such as a text description, which can be read by a screen reader)?

Is any information (such as importance, when to perform an action, if an answer is correct, etc.) conveyed by audio cues (i.e., sound effects, music) also communicated in another non-audio way (such as text)?

Is nothing referred to just by its visual or audio characteristics, such as color, size, position, shape, or sound? [1.3.3](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-3-sensory-characteristics/)

For example, rather than saying “Press the red button” you could say “Press the square red button in the lower right-hand corner that says ‘save’.”

When sharing the file, was it saved in the original file type rather than being converted to a PDF?

PDFs are very challenging to make fully accessible and cannot be edited by the user if they need a different font, etc.

Is the use of all capital letters used only for acronyms and not other textual emphasis?

If you want to emphasize text, bold the text.

Are sans serif fonts such as Courier, Arial, Verdana, and Calibri used?

Are equations and formulas presented in an accessible format? [1.1.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-1-1-non-text-content/)

See this guide for more information on [making math equations accessible](https://canvas.unl.edu/courses/120076/pages/stem-math-equations).

## Accessibility Features by Program

Below are accessibility features specific to audio and video, Microsoft Office, and PDF programs.

### Audio and Video

Audio and Video function very differently from other programs and do not use the LISTS framework. See this guide for more information on [making audio and video content accessible](https://canvas.unl.edu/courses/120076/pages/audio-and-video-accessibility-checklist).

### Canvas Learning Management System

Did you run the Ally accessibility checker and correct any errors?

It evaluates content created directly in Canvas, as well as PDF, Word, PowerPoint, and image files that have been uploaded to Canvas. It will not evaluate items that have been embedded or linked within Canvas pages (for example, using OneDrive or Google Docs links), so that content should be assessed manually. To get started, view the [Ally Quick Start Guide for Instructors](https://help.blackboard.com/Ally/Ally_for_LMS/Instructor/Quick_Start) and check out this [two-minute video on YouTube](https://www.youtube.com/watch?v=ljqOwhd1xtU).

Did you check the links, images, structure, tables, and supplements items (see relevant sections above)?

Are blinking images or content avoided? [2.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/2-3-1-three-flashes-or-below-threshold/)

Flashing images and content can cause seizures in people with epilepsy, so [do not use flashing objects](https://www.section508.gov/training/presentations/aed-cop-pptx12).

Do all of the file names and link text clearly convey to the user what will be accessed when using those links? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/); [2.4.4](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-4-link-purpose-in-context/); [2.4.6](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-6-headings-and-labels/)

Is there a clear navigational structure using the Modules page?

Are all files and link titles clearly labeled? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/); [2.4.4;](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-4-link-purpose-in-context/) [2.4.6](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-6-headings-and-labels/)

Does all embedded content (i.e., YouTube videos, podcasts) have a title or short description? [2.4.6](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-6-headings-and-labels/)

Students should know what the embedded content is if it doesn't load properly or if they cannot see it.

Do navigational buttons inform the user what will happen when they’re pressed? [2.4.6](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-6-headings-and-labels/)

Do the navigation and functional elements (such as buttons, icons, and call-to-action links) look and work the same across pages? [3.2.3](https://aaardvarkaccessibility.com/wcag-plain-english/3-2-3-consistent-navigation/); [3.2.4](https://aaardvarkaccessibility.com/wcag-plain-english/3-2-4-consistent-identification/)

### Excel

Do you run the accessibility checker and correct any errors?

Open the file in the desktop app. Then open the accessibility checker by clicking the **Accessibility icon** at the bottom of the screen or clicking **‘Review’** from the menu bar, then selecting **‘Check Accessibility’**.

Did you check the links, images, structure, tables, and supplements items (see relevant sections above)?

Do all worksheets have unique and descriptive names? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/)

1. Do all worksheets have content?

Does cell A1 contain text that gives either the title of the worksheet or information about the structure and location of the data? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/)

Assistive technologies start by reading cell A1 so the information there can help people understand what information is available in the spreadsheet.

Are there meaningful row and column labels for information in the spreadsheet? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/)

Are all data cells unmerged? [1.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-1-info-and-relationships/)

The accessibility checker will notice this in the data area but will not point out merging in headings.

Are alignment tools, such as increasing the size of cells, used to create space rather than blank rows or columns? [1.3.2](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/)

Is the end of the worksheet marked with "end of worksheet" in column A after the last row of data?

* + This tells learners using assistive technologies that there are no remaining items on that sheet.

### PDFs

Making PDFs accessible is a more complex process than other tools, so see this [PDF accessibility checklist](https://canvas.unl.edu/courses/120076/pages/pdf-accessibility-checklist-working-2) for detailed information.

### PowerPoint

Do you run the accessibility checker and correct any errors?

Open the file in the desktop app. The accessibility checker can be opened by clicking the Accessibility icon from the bottom of the screen or clicking **‘Review’** from the menu bar, then selecting **‘Check Accessibility’**.

Did you check the links, images, structure, tables, and supplements items (see relevant sections above)?

Does each slide have a title? Are all slide titles unique? [2.4.2](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-2-page-titled/)

Is the reading order on all slides presented in a logical manner? [1.3.2,](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/) [2.4.3](https://aaardvarkaccessibility.com/wcag-plain-english/2-4-3-focus-order/)

While the accessibility checker will tell you which slides to examine, you have to look at each of those slides to manually determine whether the reading order (the order in which a screen reader will read items on the slide) makes sense.

Are blinking images or content avoided? [2.3.1](https://aaardvarkaccessibility.com/wcag-plain-english/2-3-1-three-flashes-or-below-threshold/)

Does all embedded content (i.e., YouTube videos, podcasts) have a text descriptor? [1.3.2](https://aaardvarkaccessibility.com/wcag-plain-english/1-3-2-meaningful-sequence/)

Include a title or short description for all embedded content so it is clear what the embedded content is.

### Word

Do you run the accessibility checker and correct any errors?

Open the file in the desktop app. The accessibility checker can be opened by clicking the Accessibility icon from the bottom of the screen or clicking **‘Review’** from the menu bar, then selecting **‘Check Accessibility’**.

Did you check the links, images, structure, tables, and supplements items (see relevant sections above)?