

# Electronic Information Technology (EIT) Accessibility Standards

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## Background:

These standards are established to bring all EIT within the guidelines set forth in the Rehabilitation Act Amendments of 1998 (508 Compliance). The law that requires federal and state agencies adhere to a minimal level of accessibility. “Electronic information and data must be *equally accessible* to individuals with and without disabilities.” In other words, making content that works for everyone, even individuals that have sight or hearing impairments.

## [YSU's Commitment to Accessibility \(link is external\):](#)

YSU’s EIT standards are drawn from W3C Web Accessibility Initiative (WAI) and Section 508 Standards:

- [Section 508 \(link is external\)](#)
- [W3C WAI Standards \(link is external\)](#)

## General Standards For All EIT Media:

- Graphics and Photographs: Use ALT tag description for graphics and photographs (i.e., especially for graphics with content information - needs to be entered that reflects the same approach a visual person would use to interact with graphic).
- Hyperlinks: Use descriptive text for hyperlinks (“English Festival Society Form” as opposed to “click here”).
- Moving or Blinking Text or Graphics:
  - When creating text and images avoid using blinking, flashing, or scrolling animation.
  - If a script calls for movement (i.e. image slideshow, auto-updating object) ensure that the script can be paused or stopped.
- Color Contrast: Ensure that foreground and background color combinations provide sufficient contrast when viewed by someone having color deficits or when viewed on a black and white screen. To check to see if your colors pass the contrast standards set forth by W3C use the [Color Contrast Check Tool](#).

## Web Standards:

- [ADA Compliance Link](#): All University webpages must contain a link within the footer of the page to the YSU's Commitment to Accessibility website. The link language must read as "Electronic and Information Technology (EIT) Accessibility Compliance" and link to the following URL: <http://cms.ysu.edu/accessibility/ada-accessibility-compliance>. This includes Drupal, ContentM, WordPress sites. This includes web sites hosted at YSU or hosted at 3d party/cloud sites.
- [Section 508 Web Checklist \(link is external\)](#) from WebAIM
- [Text-only link](#) at the top of each web pages activates a page with no graphical elements.
- [Word Document Prohibition](#): In order to ensure that the YSU website meets the compliance standards set by the Americans with Disabilities Act (ADA) Section 508, all Word documents must be converted to either web pages<sup>i</sup> instead of posting directly or converted to accessible pdf's.

The exception would be forms (i.e., these will need to be tagged individually).

- [PDF Compliance](#): All PDFs must be ADA compliant. Please consult [Creating an Accessible PDF File \(link is external\)](#) for more information. Existing PDFs may be checked at: [Stand Alone PDF Checker \(link is external\)](#).

Note that an accessible PDF can easily be created from an accessible Word document (see below).

- If a printable version is also needed, add [printable version graphic](#) at top of web page, and link this to PDF.
- [Accessible Table](#): Here are instructions for [creating an accessible table](#) within a page.
- [iFrame Limitation](#): iFrame usage must be limited to embedding videos from services such as YouTube, and embedding spreadsheets from external services<sup>ii</sup>.
- [Frames](#): All web pages using frames must meet the [W3C HTML Techniques for Web Content Accessibility Guidelines 1.0 - Section 10 Frames](#)<sup>iii</sup>

Or [Alternatives to Frames](#) could be used.

## Video Audio and Multimedia Standards:

- Use YouTube for uploading video that will be placed on your website. See [Creating a YouTube Video \(link is external\)](#). YouTube has a built in closed caption feature that allows hearing impaired individuals to read words being spoken in the video.

Note that audio files need to be converted to video before being uploaded to YouTube.

- Closed Captioning and Subtitles: Closed captioning and subtitles are required on all video, audio or multimedia that is embedded, contained in a presentation, linked to, or uploaded to YouTube. Captioning video is needed by persons who are deaf, and it helps students with learning disabilities by presenting text visually. It also assures that important information is clearly conveyed to all students, including those for whom English is a second language.

An alternative to Closed Captioning is providing a transcript of the video that is readable by JAWS.

- Using YouTube for Video: Using YouTube has many benefits for internet bandwidth, player compatibility, website embedding and closed captioning. YouTube's closed captioning system it is not always accurate to the spoken word of the video. All videos must be checked for accuracy after being uploaded to YouTube. For more on the options available to add captions and subtitles when uploading videos to YouTube, read the [Add subtitles and closed captions](#) help document provided by Google. For more on the benefits of using YouTube for closed captioning and subtitles, watch the [YouTube Captions and Subtitles](#) video.

If someone else's video is used for educational content under the "Fair Use" copyright provisions, if the video is not captioned or provisioned with a transcript, the following steps must be followed:

- 1) Copy the video
- 2) Add the closed captioning or transcripts
- 3) Add the attribution to the creator of the content, and that YSU has added the closed captioning or transcripts.

- Multimedia Presentations: Multimedia presentations, such as video clips with audio tracks, need transcripts or captioning to describe important information. In addition, poor quality sound tracks are common when recording lectures or speeches in live settings. The best way to ensure this type of information is perceived accurately is to provide alternative text. When providing multimedia presentations in live setting on campus, closed captioning and subtitles should be on and visible during the presentation. If an audio track is being played, a transcript should be available for persons with hearing impairments.

## Email Standards:

- **Digital Newsletters:** All digital newsletter communications sent from systems like MailChimp must contain a link within the footer of the newsletter to the YSU's Commitment to Accessibility website. The link language must read as "Electronic and Information Technology (EIT) Accessibility Compliance" and link to the following URL: <http://cms.ysu.edu/accessibility/ada-accessibility-compliance>
- **Email:** Emails sent from O365 are exempt from the above "ADA Compliance Link" requirement.

## Social Media Standards:

- For Social Media Accessibility practices please see the [Social Media Best Practices](#) guide.

## Learning Management System (LMS) Content Standards:

The following minimum standards are for any content entered into to the University's LMS (Blackboard).

**The Framework:** Our current LMS and all future LMS systems will measure and evaluate accessibility levels using two sets of standards: Section 508 of the Rehabilitation Act issued from the United States federal government and the Web Content Accessibility Guidelines (WCAG 2.0) issued by the World Wide Web Consortium (W3C).

### Course Structure-Courses must follow a simple and consistent course design

- Organize all related content into a clear and concise manner, this includes: Folders, Learning Modules, Homepage
- Establish a consistent layout in each of the following:
  - Consistent color scheme
  - Same icon layout
  - Page and content titles that make sense
- Design content for ease of use
  - Keep course home simple and uncluttered
  - Arrange icons in a logical order
  - Use both icon and text for links

- Use text as primary method of delivering information (images and color are secondary)
- Ensure icons, folders, links, lessons and any additional content added to the LMS have unique and descriptive titles
- Navigation
  - Course menu must be consistent
  - Remove any tools that are not being used from tools menu (example: click off show link)
  - Make modules consistent from one week to the next. (example: start each module with course objectives , followed by module expectations, lecture, etc. ).
- Color Scheme
  - Avoid using color alone to convey important information
  - Red/green and pastels may not be distinguishable
  - Use \* or other annotation in addition to color
  - Ensure that text, graphics and images are understandable when viewed without color
  - Tool: Run Vischeck on images and web pages to show what they look like to the color blind [Link to Vischeck tool](#)
- Backgrounds
  - Keep all backgrounds simple
  - On Homepage, Documents, etc.
  - Ensure background doesn't overpower text
  - Ensure high contrast between text and background

Don't allow the background to overpower your text

Example of a Good vs. Bad Contrast Choice: [Click link for example of good vs. bad contrast color choice](#)

- Timed Response - Establish a means for requesting additional time when timed response is required:
  - Alert students that a timed response is required
  - Provide sufficient time for the student to indicate that more time is required
  - Also applies to web applications on external websites

### *Document Considerations*

#### Html

- Typically the most accessible and preferred document type
- Recommendation: provide text content in more than one format (ex: Word and PDF, or Word and HTML, or PPT and HTML, etc.)
- Use Semantic Structure (i.e. Styles in Microsoft word)
- Ensure readability:
  - Ample white space around and between blocks of text
  - Avoid complex sentences

- Divide large blocks of information into manageable sections
- Use proper lists (not indent or tab)
- Resist urge to change font sizes or color to indicate headings or structure; instead use Styles
- Standard font size 12 pt
- Font type: sans-serif (such as Arial, Verdana, Tahoma)

Word – See Word Standards Below

PDF – See PDF Standards Below

### Descriptive Hyperlinks

- Avoid using “click here” or “email me”
- Link text should make sense out-of-context
  - Good: There were many jobless during the United States Depression of history
  - Bad: For information about the United States Depression click here
- Avoid placing links too close together
- Avoid too many hyperlinks in a single document or page (“34 is a lot”)
- Rules apply to all document types

### Use of Alt Text

Requirement for all non-text elements (images, graphs, charts, audio, etc):

- Provided via ALT text or Long Descriptions
- ALT text provides a clear, concise description of the image using approximately 100 characters or less
- Long Descriptions are used when ALT text is insufficient to describe non-text element
- Avoid using “image of” or filename as ALT text
- ALT text can be added to image properties in HTML, Word, PDF, PowerPoint, etc.
- True for all document types containing non-text elements

PowerPoint – See PowerPoint Standards below

### Media

#### Audio

- Text transcript of audio
- Provided in accessible document format

#### Audio and Video

- Synchronized Captions
- Text Transcript
- Video Description

### Narrated PowerPoint

- Text Transcript
- Slide Description
- Audio must provide text transcript

### Recommended

- Creating an orientation document available on the Homepage of your course will be very helpful to students with Access issues. Include the following:
  - Describe overall layout of course
  - Types of content available in course
  - Features or Tools that will be used
  - Include Accessibility Statement
  - Provide contact information

## Standards for Creating Accessible Documents

People who are visually impaired will use assistive technologies called a screen reader or magnifier to read online documents. A screen reader will detect elements of your document and read them aloud. The structure of a document and underlying elements will determine how readable and ultimately accessible your document is. Read the overview of [Creating Accessible Electronic Content](#) explained by the National Center on Disability and Access to Education.

### Word

The elements referenced below are available in the Productivity Ribbon for your convenience.

- **Structure** allows a reader to navigate throughout your document. Include text Styles to add structure to your document.
- **Text boxes** will not be read by a screen reader. Please do not use them.
- **Figures** are any graphic including photos, charts, graphs, clipart, etc. Each figure must include alternative text which describes it. Figures are to be placed “in line with text” which is a placement property.
- **Lists** are to be created using List Styles, including bulleted or numbered lists. Use the Lists group in the Productivity Ribbon to insert bulleted or numbered lists into your document.
- **Columns** should be created using the Columns Tools in the Layout group on the Productivity Ribbon, not by using the Tab Key to format columns. When using columns remember your document should read like a newspaper, top to bottom, left to right.
- **Color and Contrast** should be taken into consideration. If you emphasize any written words with color, you must communicate it in another manner.
- **Tables** must be formatted correctly in order to make them accessible.
  - Screen readers cannot read split or merged tables.

- Use the Insert Table tool rather than drawing a table.
- Give your table a title using the Caption tool.
- Identify the header row in the Table Properties.
- Restrict the table to a single page because screen readers cannot read a split table.
- Insert a Bookmark in the first cell of the table to identify the table structure for the reader.
- Add the Document Title, Subject, Author, Keywords
- Default Language specified as English
- Change of language requires new language specification
- ALT text for images where 100 characters or less sufficient
- Long Description when ALT text is insufficient
- Create a Table of Contents, update as content is updated,
- Check document with the Productivity Ribbon
- For direct access to the ribbon click the link to [download the Word Ribbon \(.exportedUI File\)](#) (Zipped File).

Visit the [National Center on Disability and Access to Education website](#) for recommendations and instructions. See the [Instructional Resources](#) for assistance.

## PDFs

- Before creating a PDF document, check the conversion settings for Adobe PDF in word. Adobe 8.0 must be installed to properly convert documents to PDF
- Click on **Adobe PDF** located in the top menu bar, usually at the end of the bar;
- Then select **Change Conversion Settings**.
- Conversions Setting Window will appear. A callout box is pointing to the Conversion Settings pull-down menu to select the correct setting
- Be sure the following items are checked:
  - Settings:
    - View Adobe PDF result
    - Prompt for Adobe PDF file name
    - Convert Document Information
  - Application Settings:
    - Add Bookmarks to Adobe PDF
    - Add Links to Adobe PDF
    - Enable Accessibility and Reflow with Tagged Adobe PDF
    - Click OK to return to the document.

Once the settings have been changed and saved they will be applied to future conversions to PDF.

- To convert the document Click on “Adobe PDF” and select “Convert to Adobe PDF” from the menu.
- You will be prompted to Save the document; once the conversion is complete, the PDF will be opened in Adobe.

Visit the [National Center on Disability and Access to Education website](#) for recommendations and instructions. See the [Instructional Resources](#) for assistance.

### PowerPoint

- **Slide layouts** developed in PowerPoint provide the structure required for readers including headers, lists and proper reading order. Use a Layout found in the Slides group on the Home tab.
- **Images** must be given alternative text descriptions. Do not include flashing images.
- Do not include flickering/flashing text or animated text.
- **Font Size** is important. Attempt to use the default **font size** based on the **slide layout** selected. Do not use a smaller font to fill the slide. If necessary, use multiple slides to convey your information.
- **Color and Contrast** should be taken into consideration. If you emphasize any written words with color, you must communicate it in another manner.
- **Slide transitions** must be simple. Avoid automatic slide transitions.
- **Text boxes** are the last item to be read by a screen reader. The slide layout will be read first, then the text box.
- Use standard layouts (slide titles and bulleted lists)
  - Use Slide Title on all slides (i.e. Headings)
  - Avoid using Text Boxes
  - ALT text for images
- Simple data tables may be accessible, but include Long Descriptions and provide link to original PPT
- Avoid automatic slide transitions
- Embedded video must be captioned
- To create alternate formats: Use Outline View and copy/paste slide text into HTML or other program (edits needed)

Visit the [National Center on Disability and Access to Education website](#) for recommendations and instructions. See the [Instructional Resources](#) for assistance.

### Excel

- **Worksheet tabs** require descriptive titles.
- **Data** typed into a worksheet must begin in cell A1.
- **Avoid blank cells.** A screen reader may assume the document has ended. Include “no data” inside the cells and color it the same as the background of your worksheet. A screen reader will recognize this text even though it will not be seen in the cell.

- **Images** in your worksheet must contain alternative text. Charts cannot be given alternative text in Excel. The data used to create the chart must be clearly structured and precede the chart on the same worksheet.
- If you emphasize any written words with **color**, you must communicate it in another manner.
- **Tables** within Excel must have no more than one column of row headers and/or no more than two rows of column headings. Table elements must be defined by applying a Named Ranges to the table region, row headers and column headers. Do not use merged cells within a table. Please view this video resources.

Visit the [National Center on Disability and Access to Education website](#) for recommendations and instructions. See the [Instructional Resources](#) for assistance.

## Appendix A

### Instructional Resources

#### All Topics

[Accessibility by the Numbers](#)

[Creating Accessible Electronic Content](#)

[The National Center on Disability and Access to Education ~ Cheat sheets website](#)

[Creating Accessible Microsoft Office 2010 Documents provided by the Texas Governor's Committee on People with Disabilities](#)

#### Word

[Word Cheat Sheets](#)

[YouTube Video: Requirements to Make a Word Document Accessible](#)

[YouTube Video: Templates and Styles, the Basics \(Headings/Structure\)](#)

[YouTube Video: How to Make Hyperlinks Accessible](#)

[YouTube Video: How to Make Figures Accessible](#)

[YouTube Video: Lists and Columns](#)

[YouTube Video: How to Make Accessible Tables](#)

[YouTube Video: Word Forms](#)

[YouTube Video: Converting Word 2010 to PDF](#)

#### Excel

[Excel Cheat Sheet](#)

[YouTube Video: How to Make an Excel Spreadsheet Accessible, Part 1](#)

[YouTube Video: How to Make an Excel Spreadsheet Accessible, Part 2](#)

[YouTube Video: How to Make Accessible Excel Forms, Part 1](#)

[YouTube Video: How to Make Accessible Excel Forms, Part 2](#)

#### PowerPoint

[PowerPoint Cheat Sheet](#)

[YouTube Video: Requirements to Make a Presentation Accessible](#)

[YouTube Video: PowerPoint: Adding Tables, Charts, Images and Shapes](#)

## PDF/ Adobe

[Adobe Cheat Sheet](#)

[YouTube Video: Converting Word 2010 to PDF](#)

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<sup>i</sup> Converting a Word .doc to a web page:

- Creating a New Basic Page: [ContentM \(link is external\)](#), [Drupal](#)
- Copying and Pasting From Word: [ContentM \(link is external\)](#), [Drupal](#)

<sup>ii</sup> When using an IFrame to read in content from another site, insert a link into your `<iframe></frame>` tags to the page itself. For example: `<a href="https://cms.yosu.edu/nameofpage.html">View the content of this inline frame</a>` within your browser.

<sup>iii</sup> In Summary:

1. Each individual frame as part of a frame set must have its own title.
2. Provide a text equivalent for every non-text element (e.g., via "alt", "longdesc", or in element content).
3. Describe the purpose of frames and how frames relate to each other if it is not obvious by frame titles alone.
4. Ensure that dynamic content is accessible or provide an alternative presentation or page.
5. Ensure that equivalents for dynamic content are updated when the dynamic content changes.
6. Content developers should avoid specifying a new window as the target of a frame with `target="_blank"`.