



SCHOOL OF SOCIAL WORK

Electronic Accessibility

INDIANA UNIVERSITY

Overview

- [Understanding Accessibility](#)
- People with disabilities account for about 20% of the population according to webaim.org
- The major categories of disability types are:
 - **Visual:** Blindness, low vision, color-blindness
 - **Hearing:** Deafness and hard-of-hearing
 - **Motor:** Inability to use a mouse, slow response time, limited fine motor control
 - **Cognitive:** Learning disabilities, distractibility, inability to remember or focus on large amounts of information
- [Web Accessibility Basics \(Video\)](#)



Indiana University Electronic Compliance Impact

- [Electronic Information Technology \(EIT\) Accessibility Compliance \(website\)](#)
 - Websites and all attachments
 - Canvas and all files
 - Sonia
 - Email with and without attachments
 - Presentations
 - Any form of electronic communication.



General guidelines

Each of these guidelines is crucial to create a document with a base level of accessibility:

- Provide a [descriptive title](#) and provide [plain language](#)
- Arrange a [clear document structure](#)
- Provide [alternative text](#) for visual content
- Write [descriptive labels for links](#)
- [Apply color sparingly](#)

These core guidelines for accessibility should be applied to all documents, regardless of the authoring tool or software. However, individual applications of these guidelines to each document may vary based on the authoring tool used.



Provide a descriptive title and provide plain language

- [Provide a descriptive document file name and title \(website\)](#)
 - Example: PSY-P101_Intro_Psychology_Section_00000_Spring2016_Syllabus_JDoe.docx
 - Include similar information when writing the title of the document, and apply appropriate punctuation, e.g., no underscores.
- [Use the simplest language appropriate for the content \(website\)](#)
 - Avoid using abbreviations, jargon, complex language, or any content that might confuse the reader unless necessary. If this content must be included, provide definitions for abbreviations and jargon, as well as extra resources for further comprehension of complex language or topics.



Arrange a clear document structure

- [Structure the document to create a meaningful outline \(website\)](#)
- Create an outline using:
 - Headings
 - Lists
 - Data Tables
 - Columns
 - Table of Contents



Understanding heading levels

Taken together, the headings should form a well-structured hierarchy:

- Heading Level 1 (Main topic)
 - Heading Level 2 (First sub-topic or first section)
 - Heading Level 3
 - Heading Level 3
 - Heading Level 2 (Second sub-topic or first section)
 - Heading Level 3
 - Heading Level 4
 - Heading Level 4
 - Heading Level 2 (Third sub-topic or first section)



Pictures / Images

- [Provide appropriate descriptions for all informative non-text content \(Website\)](#)
 - Alternative descriptions are required for all types of images, charts, graphs, and other informative non-text (visual) content.
 - If the image is purely for decoration and serves no informative purpose, alternative text is not necessary.



Hyperlinks / links / urls

- [Provide clear and understandable labels for links \(Website\)](#)
 - When writing link text, avoid using common, non-descriptive phrases like “Click Here,” “More,” “Read More” or using only the URL (e.g., <http://policies.iu.edu/policies/categories/administration-operations/equal-opportunity/ADA-policy.shtml>).
 - For example: the sentence “for more information, visit the [White House page on the President of the United States](#)” will sound clearer and more useful to users of assistive technology than “for more information on the President of the United States, [click here](#).”
 - If a document is meant to be printed instead of viewed electronically, then providing both descriptive link text and the full URL is highly recommended.



Provide sufficient color contrast

Great Color Contrast (21:1)

Adequate Color Contrast (4.5:1)

Insufficient Color Contrast (3:1)

Great Color Contrast (7:1)

Adequate Color Contrast (4.5:1)

Insufficient Color Contrast (3:1)

Great Color Contrast (7:1)

Adequate Color Contrast (4.5:1)

Insufficient Color Contrast (3:1)

contrast	ratio
Text Color: Black: RGB(0, 0, 0)	Background Color: White: RGB(255, 255, 255)
21	1

- Multiple websites can be found to help test for color contrast concerns by [Googling "color contrast checkers"](#). As an alternative to web-based tools, a sample of the document may be printed using black and white or grayscale settings, then manually verifying the content can be read.

Non-link text. **This is a link with great differentiation. (4.67:1, 4.5:1)** More non-link text.

Non-link text. **This is a link with adequate differentiation. (3.0:1, 6.97:1)** More non-link text.

Non-link text. **This is a link with insufficient differentiation. (2.0:1, 10.5:1)** More non-link text.



Avoid reliance on sensory dependent instructions

- Non-visual users will not be aware of the shape or colors of font styles, font-weight, or other purely visual means. Information should never only be conveyed through color, font changes, shape, size, or location. Any information conveyed using such techniques should also be denoted using a text based technique. Also, care must be taken when writing instructions to ensure they are not dependent upon visual characteristics. For example, the instruction to "Click the large green button to continue" will not be helpful to a non-visual user because they will not be aware of the relative size or color of user interface elements.
- Example of using both color and text to convey information

The following list shows names of people invited to a party.

Those who cannot attend are marked in red:

- Chris
- Jamie (not attending)
- Kim
- Riley
- Sam (not attending)



Converting to accessible format

- [DOWNLOAD THE WORD DOCUMENT](#). We will be converting the document into an [accessible format](#).
- We'll use some of the tutorials from the following sites:
 - [Create accessible documents using Microsoft Word \(website\)](#)
 - [NCDAE: Cheat sheets for creating accessible documents \(website\)](#)
 - [Microsoft Word - Creating Accessible Documents \(website\)](#)



What's next?

- Revise all documents on the web
 - New updated documents on the websites please send web developer original file not the pdf. Final check for compliance before uploading must be made.
 - For documents that are used as forms we will need to migrate to a web form. Documents / PDFs structure requirements are extensive. It is easier to move these types of documents to a web form and they are far more accessible than documents.



Reference

- Webaim.org
- Introductory Web Accessibility – Canvas
- Accessibility <https://accessibility.iu.edu/index.html>
- [Power point version of Electronic Accessibility](#)

