A Site Owner's Guide to YaleSites Accessibility Handout

https://yalesites.yale.edu/refresh-my-site – If you need assistance updating to a YaleSites 2016 templated theme email yalesites@yale.edu. You can say you’d like assistance and that Chris Mongillo agreed to help you through the process.

https://accessibility.yale.edu – Information on all things web accessibility related.

https://wave.webaim.org/ – Accessibility Evaluation tool for web pages. Browser extension for Firefox and Chrome. It will give you more information than you need as an editor, but it calls out headings that are not structured sequentially and when alt text for links is missing.


For those who asked about video that demos assistive technology, this is entitled Web Accessibility for People with Vision Impairments. Randy Knapp, a blind person, demos JAWS screen reader software: https://www.youtube.com/watch?v=2j2x2miPPDQ

How to Lookup Your YaleSites Theme

- Once CAS’d in go to Appearance in the toolbar menu.
- The theme your site is currently using will be enabled at the top of the page.

Visual Disabilities

Blindness

- Use Screen readers or Braille readers to navigate a website
- Can use technology to skim the page
- May have trouble with automatically playing or moving content
- Rely on good underlying code, headings, links, image descriptions and textual information

Color Blindness and Low Vision

- May increase default font size or change colors on their screen
- Rely on good color contrast
- True text, not images of text
- Language that doesn’t describe the location, color, or shape of the page

Text Formatting

- Never underline or strikethrough
- Generally avoid: center, right, or justified alignment. Left alignment is easiest to read.
- Generally avoid: All Caps (acronyms OK)
• OK if used judiciously for emphasis: bold, italics

Use Lists Where Possible

• Lists are easier to scan than paragraphs for a sighted and a blind person.
• Use the list tool in the WYSIWYG body field for properly coded lists.
• Screen readers will announce a list and the number of items in it if the list tool is used.

Example of content as paragraph and list

Deque Universities' Web Accessibility Curriculum discusses why web accessibility matters, types of disabilities and the related challenges (Visual, Auditory, Motor, Cognitive, Seizure), and the assistive technologies and methods used by people with disabilities to access the web.

Deque Universities' Web Accessibility Curriculum discusses:

• Why web accessibility matters
• Types of disabilities and the related challenges (Visual, Auditory, Motor, Cognitive, Seizure)
• The assistive technologies and methods used by people with disabilities to access the web

Avoid Text Decorations and Images of Text

Your vision allows you to select an area of a screen you need. Assistive technology allows a blind or low-vision person to do it by character provided true headings are used.

Headings

Use True Headings

• Page title on YaleSites is by default an h1.
• Should create a logical outline. Convey main idea of the page. H2 starting new sections h3 starting sub sections within the parent h2.
• Nest headings hierarchically, don’t skip levels. (don’t jump from h2-h5)
• Don’t choose headings based on appearance
• Bolding normal text does not create a true heading. It won’t be read as such by a screen reader.
Links

- Use descriptive links that are meaningful as stand-alone elements.

Descriptive Links

- Lynda.com is free to anyone with an active Yale NetID.
- WebAIM offers in depth explanation of accessibility issues and on-site training for a fee.
- The W3C's ARIA authoring practices document offers demonstrations of most development patterns developers should know.

Nondescript Links when read as stand-alone links.

- Free Lynda.com tutorials for anyone with an active Yale NetID here.
- WebAIM offers in depth explanation of accessibility issues and on-site training for a fee here.
- Click here for W3C’s ARIA authoring practices document.

URLs as Links: Not too long

Too long: https://yalesites.yale.edu/refresh-my-site
Alternative: Refresh your site.

Too long: https://webaim.org/resources/contrastchecker
Alternative: Webaim color contrast checker

OK

yalecollege.yale.edu

usability.yale.edu/web-accessibility
Color Contrast

Color Blindness

Affects more men (~8%) than women (~0.5%)

The most common is red-green color-blindness rely on:

Information conveyed by color must be accompanied by a programmatical-discernible text alternative. That is, the text needs to be read in a way that makes sense without the color.

- Good color contrast
- Non-color ways of conveying information (e.g. words or symbols)

https://webaim.org/resources/contrastchecker

Tables

Tables are for Data, not for layout

Layout Tables are Discouraged

Data tables should always have column headings.

People using screen readers can have the row and column headers read aloud as they navigate through the table.

People with low vision have devices that change:
Table captions are recommended because screen readers use them to identify and distinguish tables on a page.

Screen reader display of one table without a table caption and two with.
Complex tables are confusing even for users without disabilities.

How to avoid:
– Split the content into multiple tables
– Split the content into multiple pages

Sample Complex table:

<table>
<thead>
<tr>
<th>Day</th>
<th>Schedule</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>8:00 a.m. 5:00 p.m.</td>
<td>Introduction to XML</td>
</tr>
<tr>
<td>Tuesday</td>
<td>8:00 a.m. 11:00 a.m.</td>
<td>Validity, DTD and Relax NG</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11:00 a.m. 2:00 p.m.</td>
<td>XSL Transformations</td>
</tr>
<tr>
<td>Tuesday</td>
<td>2:00 p.m. 5:00 p.m.</td>
<td>XSL Transformations</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8:00 a.m. 12:00 p.m.</td>
<td>XSL Formatting Objects</td>
</tr>
</tbody>
</table>

Same table made simpler. Click on existing table in the body field, and right-click to select table properties from the dropdown menu.
Make first row Headers and add table caption as shown here.

<table>
<thead>
<tr>
<th>Day</th>
<th>Begin</th>
<th>End</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
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</table>

Images

Users with cognitive disabilities or users with low quality internet connections may prefer to turn images off altogether.

- Alt text is read aloud by screen readers to give users an understanding of an image meaning context with the rest of the content on a page.
- Alt text should describe the image in context with the rest of the page. The length should be (no more than 250 characters).
• Alternative text is generally provided in two ways: nearby, real text; or alt text.
• If the same information is in text close by (e.g. a surrounding paragraph), that is normally sufficient for accessibility.
• Images as links MUST have alt text that describes the link destination.
• If you’re using YaleSites templated themes you can omit alt text for a decorative image.
• Use your own judgement to discern whether or not an image is informative or decorative.

A page about Yale’s best classes.
alt = “A student attending a class session of Psychology 157 in a crowded lecture hall”

A clothing website.

Auditory, Motor and Cognitive Disabilities

Deafness / Low Hearing

Rely on:

• Captions and transcripts of videos and audio recordings
• Live captions for live video and audio
• Non-sound ways of conveying information

For information on captioning resources: https://usability.yale.edu/web-accessibility/articles/multimedia

Paralysis, Low Coordination, Tremors, Numbness

Rely on:

• Keyboards in lieu of a mouse or track pad.
• Skip links
Impairments to Learning, Reading, Memory, Attention, Seizure

- Largest population by far, with many undiagnosed
- Limited cognitive resources to devote to web tasks
- Rely on many of the same resources as other disabilities.
- [www.hemingwayapp.com](http://www.hemingwayapp.com)
- High school reading level is recommended for web writing.
- YaleSites offers Writing For the Web: [https://yalesites.yale.edu/calendar](https://yalesites.yale.edu/calendar)

Documents

Information on making PDFs and other documents accessible can be found here. [https://usability.yale.edu/web-accessibility/articles/pdfs-documents](https://usability.yale.edu/web-accessibility/articles/pdfs-documents)

Deciding how best to remediate documents:

- How many of the PDFs associated with this site are actually used?
- Do you have native files for the PDF documents?
- How often would you say they are updated?
- Can any of them be made into HTML files instead of documents, or can a companion HTML file be provided for disabled folks