

Yale ITS Accessibility Training

CONTENT CREATORS AND EDITORS

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Yale ITS Web Technologies

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Yale *Information Technology Services*

Outline

- Disabilities & Assistive Technology
- Standards
- Policy
- Text
- Links
- Tables
- Images
- Media & Animation
- Odds & Ends

Disabilities & Assistive Technology

Yale *Information Technology Services*

Kinds of Disabilities

1. Visual
2. Auditory
3. Motor
4. Cognitive, Attention, Learning Disability, Neurological, and Seizure
5. Speech

Assistive Technology

- Screen readers & Braille readers
- High contrast settings in browsers, inverted colors
- Screen magnifiers, text resizing, zooming
- Captions and Transcripts
- Keyboards, speech-recognition software, mouth-operated accessories
- Disabling images, media, and styles

Standards

Standards

- WCAG: Web Content Accessibility Guidelines
- WCAG 1.0: 1999
- WCAG 2.0: 2008
- More up to date than Section 508
- Three levels: A, AA, and AAA
 - Yale aims for AA
 - Almost no one aims for AAA

WCAG

- WCAG provides standards for:
 - Content editors
 - Web developers and site builders
 - Visual designers
 - Software engineers
 - Device manufacturers

Policy

Why is Action Required

1. Legal Compliance
2. Risk (reputational, legal, financial)
3. Being proactive lets us set our own process, timeline, and agenda
4. Supports Yale's aspirations
5. Aligns well with making "an accessible Yale".

Making Yale's Digital Campus accessible to people with disabilities is the right thing to do.

Office of the President

[About](#)[Programs & Outreach](#)[Advisory Groups](#)[Speeches & Writings](#)[Goals for](#)[HOME](#) > [GOALS FOR YALE](#)

Thinking About Yale's Future: Goals for the University

Yale seeks to become the world's most student-centered research university, a preeminent institution unified, innovative, and accessible across all schools, departments, and programs.

A *unified* Yale leverages its broad scope but modest size to bring together schools and programs to synthesize or enrich new areas of teaching and scholarship. An *innovative* Yale values and promotes creativity and entrepreneurial spirit in all of its activities. And an *accessible* Yale opens its doors based on individuals' accomplishments, potential, and ability to contribute to and learn from others in the university community.

Share Your

Yale faculty and staff, please share our goals for the future. You will be prompted to use your Yale NetID.

SHARE YOUR

Draft Policy

- Requires conformance to WCAG 2.0 AA
- Applies to all websites and web applications conducting university business, both custom and vended
 - New or redesigned websites must be accessible at launch
 - Existing websites must be remediated on request of the Accessibility Steering Committee
- Responsibility is on the site owner and their Dean, VP, Chair, or Director
- Exceptions for technical feasibility alone

Digital vs Physical Process: Why Is Accessibility Hard?

Physical accessibility is managed differently than digital accessibility because so many people can alter our digital campus



Accessibility Is a Process

Accessibility remediation is a gradual process of improvement.

Unlike building a bridge, we realize value for each step along the journey.



Text

The Web is Different!

- Users have less attention on the internet.
- Help users spend as little effort as possible on your website.

Avoid Text Decorations

- Always avoid: underline, ~~strikethrough~~
- Always avoid: changing the font, color, or text size
- Generally avoid: center, right, or justified alignment
- Generally avoid: All Caps (acronyms OK)
- OK if used judiciously for emphasis: **bold**, *italics*

Use True Headings

- Six levels: H1 - H6.
- Nest the headings hierarchically, don't skip levels (don't jump from h2-h5)
- Don't choose headings based on appearance
- Not the same as **bold**

BENEFITS

> Financial Wellness

> Health Benefits

> My Benefits at Yale

> Paid Time Off

Bereavement

Jury duty and military leave

Official Yale Holidays

> Wellness

> Work-Life and Childcare

> Yale Signature Benefits

Paid Time Off

To help you manage your work/life needs, Yale provides all staff paid time off for the following:

- [Official Yale Holidays](#)
- [Bereavement](#)
- [Jury duty and military leave](#)

Paid time off (PTO) is designed to provide staff time away from work to attend to personal responsibilities and balance the demands of both their professional and personal lives. Staff are encouraged to provide advance notice and coordinate schedules with their managers for planned days off. PTO is provided to staff as follows:

Clerical and Technical and Security

- [Personal time, sick pay and vacation time summary for those hired before July 1, 2009](#)
- [Personal time, sick pay and vacation time summary for those hired after July 1, 2009](#)
- [Carryover](#)

Faculty

- [Leave of Absence](#)
- [Faculty Handbook](#)

Managerial and Professional

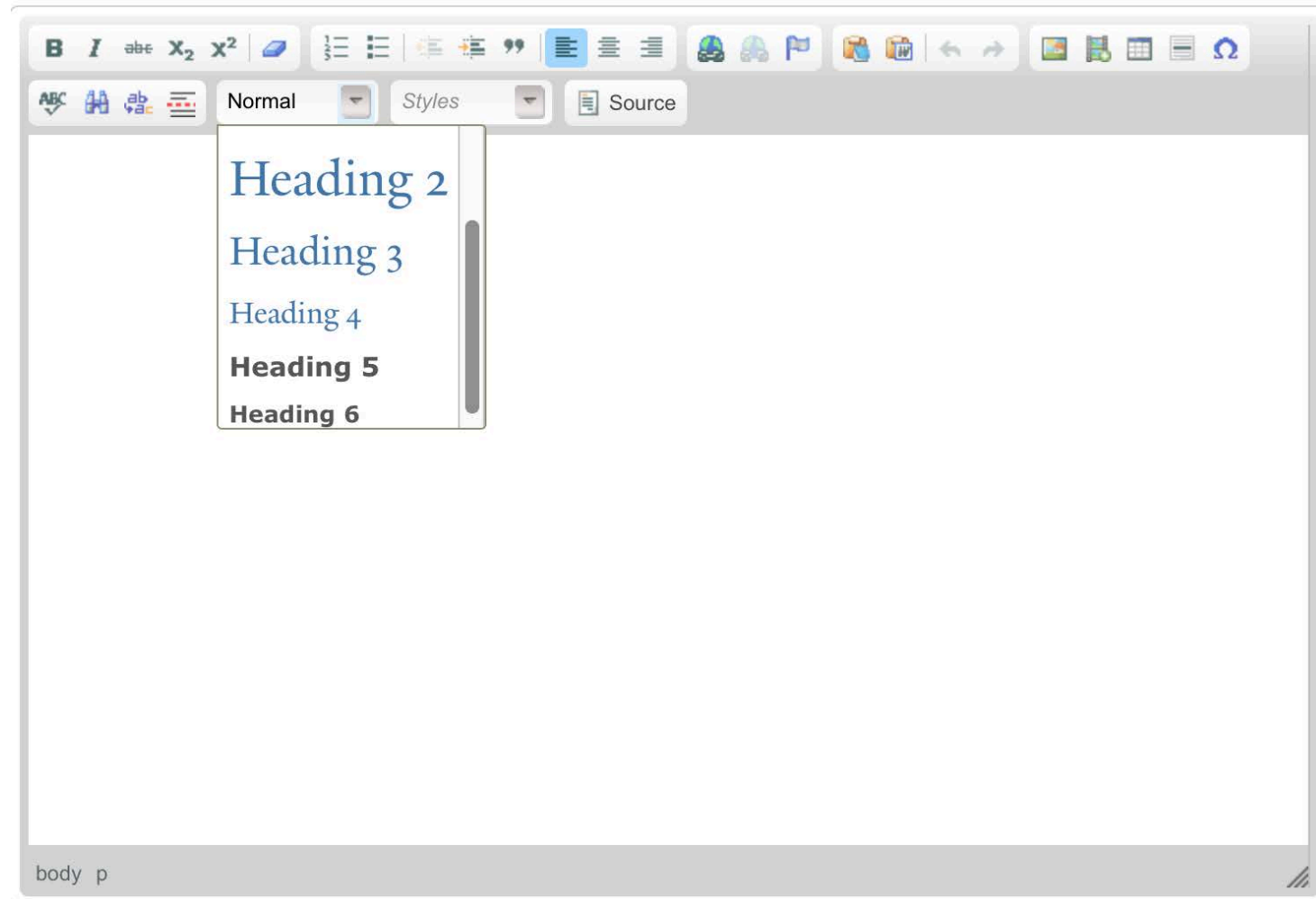
- [PTO and Flex Days](#)
- [Sick pay and short-term disability](#)

Postdoctoral Associates

- [Leave of Absence](#)

Service and Maintenance

Use True Headings



Avoid Images of Text

- If possible, use text itself, rather than uploading images of text
- When zoomed, images of text can become illegible

Avoid Images of Text

Yale University

A blurred image of the Yale University logo, showing the text "Yale University" in a serif font, with a crest to the right. The image is intentionally out of focus to illustrate the concept of avoiding images of text.

Use Lists

- Lists are easier to scan, better guide the eye than paragraphs
- Use numbered and bulleted lists, where possible

Reading Level

- Cognitive, attention, and learning disabilities are by far more common than all other disabilities combined.
- Even users without disabilities have fewer cognitive resources available on the web

Reading Level

- Aim for a lower secondary reading level
- Aim for ~80 words per paragraph
- Use resources like <http://www.hemingwayapp.com>

Sensory Characteristics

- Avoid describing where things are on the page
 - “To apply, click the button in the sidebar on the right”
- Avoid describing things by their color
 - “To apply, click the blue button”

Links

Links

- Many users with blindness prefer to have their screen reader announce a list of all links
- Links can't be understood if the link text is not descriptive
 - “Click Here”, “More”, “Proceed”
- Bad link text can be made accessible, but it requires effort from developers
- Aim to have link text make sense out of context

Links

- To apply for the program, click [here](#).
- Apply to the [program](#).
- [Apply to the program](#).
- [Apply to Yale Undergraduate Admissions](#).

Links

- Avoid having multiple links to the same destination next to one another, or even on the same page
- Avoid using images as links (it can be done, but save it for developers)
- A “title” is unnecessary and generally not helpful, but it’s not harmful, either.

Tables

Tables

- Tables are for *data*, not for layout

Avoid: Layout Tables

<ul style="list-style-type: none">• Link 1• Link 2• Link 3	<ul style="list-style-type: none">• Link 4• Link 5• Link 6	<ul style="list-style-type: none">• Link 7• Link 8
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<picture of student>	<p>Joe Student</p> <p>Joe is one of our favorite students. He is a sophomore from anytime, USA. He is majoring in Philosophy. In his spare time, he is a member of the football team, the crew team, the cross country team, and swim team.</p>
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Good: Data Tables

Year	Coldest Day	Warmest Day
2015	50%	50%
2016	52%	48%
2017	49%	51%

Tables

- Tables should always have column headings
- Longer tables should have row headings and column headings

Complex Tables

Day	Seminar		
	Schedule		Topic
	Begin	End	
Monday	8:00 a.m.	5:00 p.m.	Introduction to XML
			Validity: DTD and Relax NG
Tuesday	8:00 a.m.	11:00 a.m.	XPath
	11:00 a.m.	2:00 p.m.	
	2:00 p.m.	5:00 p.m.	XSL Transformations
Wednesday	8:00 a.m.	12:00 p.m.	XSL Formatting Objects

Complex Tables

- They are confusing even for users without disabilities
- How to avoid:
 - Split the content into multiple tables
 - Split the content into multiple pages
 - Ask whether complex headings are **really** necessary

Images

Images

- Users with blindness cannot see images
- Users with cognitive disabilities or users with low quality internet connections may prefer to turn images off altogether
- Images that are not seen may require alternative text (“alt” text)

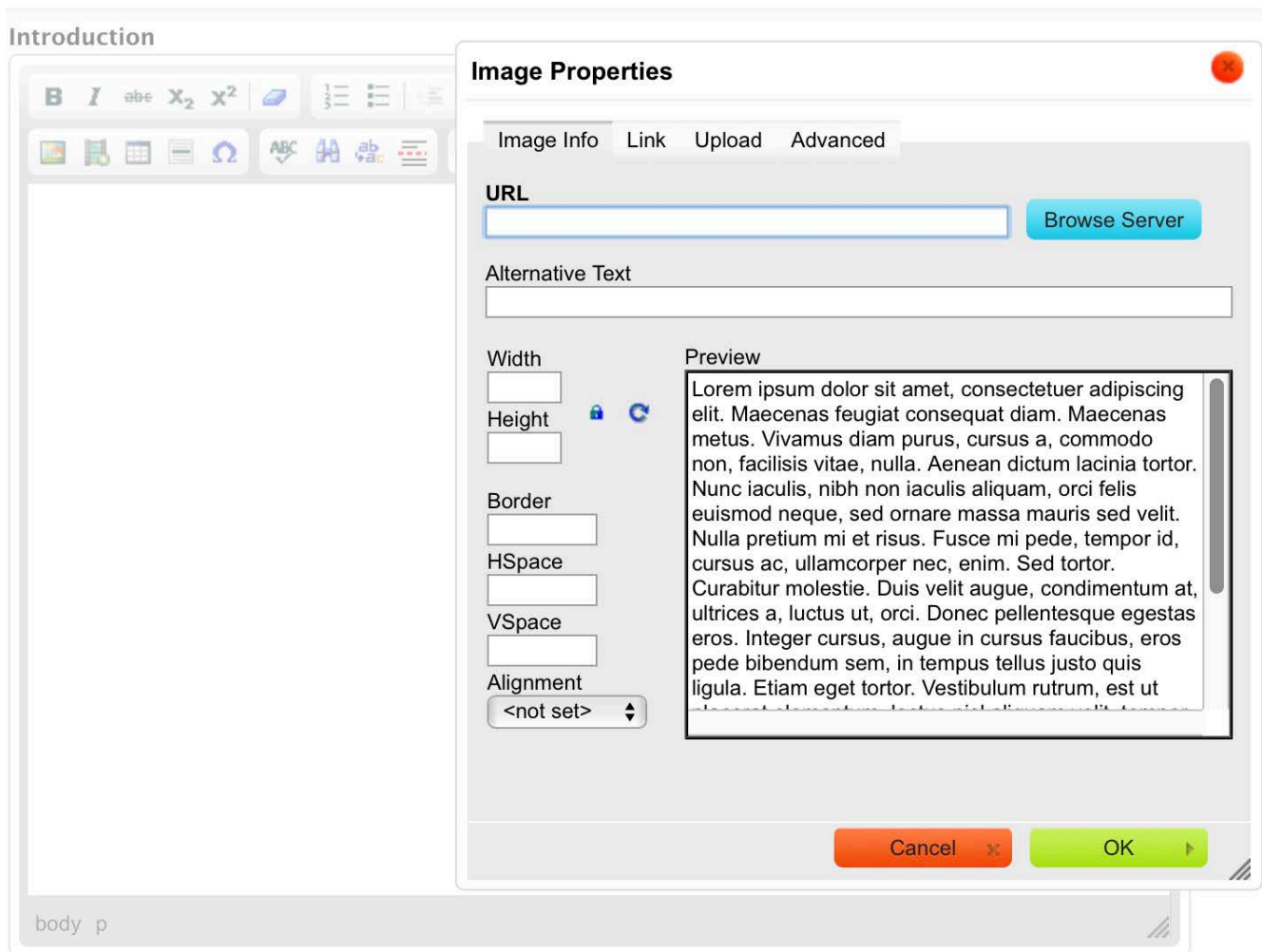
Image Purpose

- If the purpose of the image is purely decoration — to convey a mood, to take up space, etc — the image should **not** have alt text.
- If the purpose of the image is to convey information, it **does** need alt text

Alt Text

- Alt text should cover the **context** and **purpose** of the image, not **describe** the image.
- Avoid “image of”, etc.
- Search Indexes (e.g. Google) will see the alt text

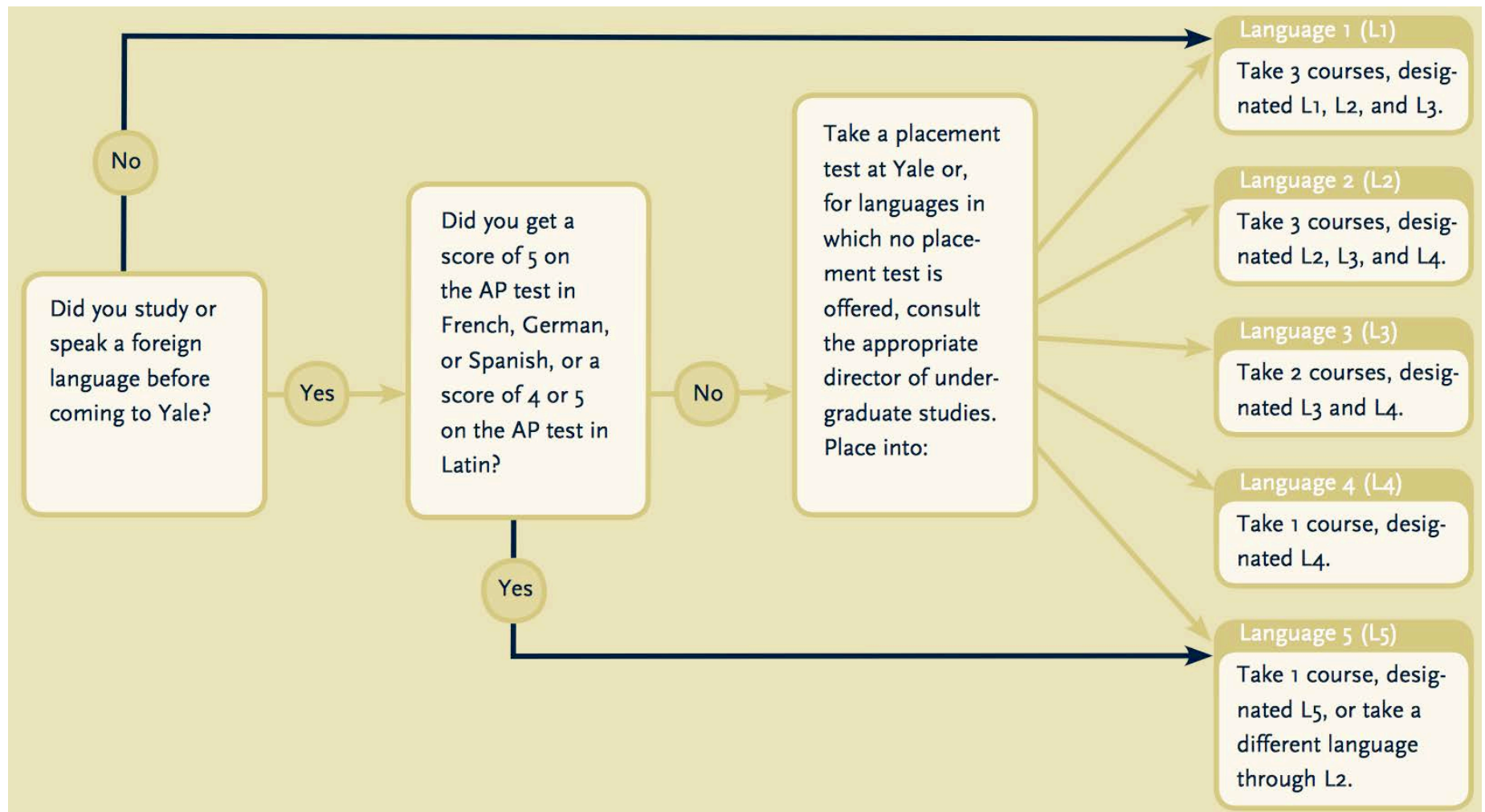
Alt Text



“title” and “longdesc”

- “title” is unnecessary
- “longdesc” should be avoided

Complex Images



Complex Images

- Simple alt text isn't sufficient, because the information is too complicated for a short sentence or two.
- Include short alt text anyway.
- Include the same information in a close by paragraph or table.

Images as Links

- Avoid images as links
- Image links must have good alt text

Media and Animation

Animated Gifs

- These are practically never OK

Videos and Audio

- For videos, captions and descriptive transcripts are required for accessibility.
- YouTube automatic captions are frequently error prone. They can be an OK starting point, but they should be edited.
- Look for already-captioned options if possible.
- For audio recordings, transcripts are required.

Odds and Ends

Odds and Ends

- If possible, make something a web page, rather than a file.
- If something must be a file, a PDF is best, followed by a Word file.
- For more info: see webaim.org and Lynda.com videos

Thank you!

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Questions?