# **Web Accessibility Standards and Guidelines**

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# Part 1: Web Sites, Web-Based Systems, and Web-Based Content Accessibility Standards

#### Introduction

This document establishes the official university standards and guidelines for the accessibility of web technology in accordance with the Temple University policy on the Accessibility of Information and Technology.

Any information and technology -- such as, but not limited to, computers and ancillary equipment, instructional materials, software, videos, multimedia, telecommunications, or webbased content or products -- developed, procured, maintained, or used in carrying out university activities must be compliant with Sections 504 and 508 of the Rehabilitation Act of 1973, as amended, the Americans with Disabilities Act of 1990, as amended, and other related state, and federal laws, as well as other related university policies.

Temple University is committed to ensuring that the web sites, web-based systems, and web-based content (herein referred to as web technology) that it creates or provides in conducting its activities is accessible to everyone who needs it. The university strives to employ accessible and responsive design principals when creating, purchasing, or otherwise providing official web technology by adhering to federal guidelines, statues, and laws, as well as the <u>World Wide Web Consortium's Accessibility Initiative</u> for <u>Web Content Accessibility Guidelines</u> (version 2.0) (WCAG 2.0).

All official university web technologies used by faculty, staff, or used for the instruction of students (including but not limited to admissions, advising, catalogs, course work, registration, and student services) must be accessible according to established university policy, standards, and guidelines.

#### Scope

This document provides accessibility standards and guidelines for web technology that is used as an official means of communication for Temple University. These standards and guidelines apply to all university web technology used to conduct university activities, except web technology created or published by students, faculty, or employees for personal use.

This document is designed to ensure that all web technologies created, purchased, or used to carry out university activities shall be accessible, with or without a reasonable accommodation, to individuals with

disclosed disabilities, except when an exception has been granted. Students or other web technology creators/providers are encouraged to adopt university standards when creating personal content.

These standards and guidelines are derived from and are intended to be consistent with the requirements of federal and state laws including, but not limited to, the <u>Rehabilitation Act of 1973, as amended</u>, <u>Americans with Disabilities Act of 1990, as amended</u>, <u>Telecommunications Act of 1996</u>, and the Twenty-First Century Communications and Video Accessibility Act of 2010.

These standards and guidelines are intended to complement and be consistent with other university policies or standards that pertain to accessibility and web technology.

These standards and guidelines apply to all Temple-Related Individuals and all schools, colleges, departments, centers, institutes, administrative units, offices, and authorized organizations (hereafter referred to as schools, colleges, and departments), and content created for these units in-house or by external entities.

#### **Definitions**

Disability: Under the Americans with Disabilities Act of 1990 (ADA), as amended, §. 12102:

The term "disability" means, with respect to an individual-

- (A) a physical or mental impairment that substantially limits one or more major life activities of such individual;
- (B) a record of such an impairment; or
- (C) being regarded as having such an impairment

**Disclosed Disability:** A disclosed disability is a disability of a registered student, faculty, or staff member whom Disability Resources and Services or Human Resources identifies as a qualified individual with a disability as a result of his/her submitting appropriate documentation for accommodations under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, as amended, and in compliance with university policy.

**Information and technology related to university activities:** Information and technology related to university activities include, but are not limited to, any information and technology that students, faculty, staff, and prospective students must use to participate effectively in programs, services, and activities offered by the university. Examples include, but are not limited to, athletics, departmental web sites, general financial services, housing and residential life, human resources, student activities and support services, student financial services, student information systems, learning management systems, web-based teaching, evaluation, communication systems used in the classroom, and school and college web sites.

**Major life activities:** In general, major life activities include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working. They can also

include the operation of a major bodily function including, but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions. <a href="http://www.eeoc.gov/laws/statutes/ada.cfm">http://www.eeoc.gov/laws/statutes/ada.cfm</a>

**Reasonable Accommodation:** In general, a reasonable accommodation is any change in the work or educational environment or in the way things are customarily done that enables an individual with a disability to enjoy equal employment or educational opportunities, except when such accommodation would cause an undue hardship or would fundamentally alter the nature or operation of the business or course of study.

**Temple-Related Individuals:** Includes students, faculty, staff, and university affiliates who interact with university resources. (See the <u>Student Conduct Code</u> for a definition of "student.")

**Undue Hardship:** The term "<u>undue hardship</u>" means, with respect to accessibility accommodations, significant difficulty or expense and focuses on the resources and circumstances in relation to the cost or difficulty to the university of providing a specific accommodation. Undue hardship refers not only to financial difficulty, but to reasonable accommodations that are unduly extensive, substantial, or disruptive, or those that would fundamentally alter the nature or operation of the business or course of study. The financial hardship of an individual unit does not constitute undue hardship.

**Web Technology:** Web technology includes web sites, web pages, web-based intranet and internet information systems, and the web-based content contained therein.

Web technology related to core academic functions: Web technology related to academic functions includes, but is not limited to, any web based information and technology that students, faculty, and prospective students must use in order to enroll in the university, complete course requirements, and make progress towards a degree. Examples include, but are not limited to, student information systems, learning management systems, web-based teaching, evaluation, and communication systems used in the classroom, and school and college web sites.

Web technology related to core university business: Web technology that students, faculty, and staff use to effectively participate in programs, services, and activities offered by the university. Examples include, but are not limited to web technology used for athletics, housing and residential life, student financial services, student activities and support services, human resources, general financial services, and departmental web sites.

#### Responsibilities

The individual, school, college, or department creating or purchasing web technologies is responsible for abiding by the Temple University Accessibility and Information Technology policy and ensuring that the web technology is compliant with the Americans with Disabilities Act, as amended, and with standards established in the Federal Rehabilitation Act, Sections 504 and 508 (specifically, subsections 1194.22 and 1194.31), and should conform to WCAG 2.0 (level AA) published as part of the Web Accessibility Initiative of the World Wide Web Consortium. The Accessible Technology Compliance Committee may grant exceptions to adherence to this policy on an individual basis under several circumstances

including, but not limited to, undue hardship or if a reasonable accommodation can provide equal and equitable access.

#### **Compliance dates**

All new and existing web technology must be compliant according to the following schedule.

#### Web technology created after adoption of these standards

All new web technology related to university activities created on or after the effective date of these standards and guidelines must be compliant with the <u>Americans with Disabilities Act, as amended</u>, and conform to the standards established in the Federal Rehabilitation Act, Sections 504 and 508 (specifically, subsections 1194.22 and 1194.31), and should conform to <u>WCAG 2.0</u> (level AA) published as part of the <u>Web Accessibility Initiative</u> of the <u>World Wide Web</u>

Consortium, unless granted an exception under the Accessibility of Information and Technology policy by the university's Accessible Technology Compliance Committee.

#### Web technology created between 1/1/2011 and 1/1/2013

All web technologies related to core academic activities or core university business that were created or revised (i.e., significantly redesigned or a majority of the content updated) after 2010 and before the web accessibility guidelines effective date of January 1, 2013 must have been made compliant with the Americans with Disabilities Act, as amended, and conform to the standards established in the Federal Rehabilitation Act, Sections 504 and 508 (specifically, subsections 1194.22 and 1194.31) by January 1, 2015, or have a plan established for remediation so that the sites will conform to WCAG 2.0 (level AA) published as part of the Web Accessibility Initiative of the World Wide Web Consortium, unless granted an exception under the Accessibility of Information and Technology policy by the university's Accessible Technology Compliance Committee.

Content for web pages will be considered to have been revised or updated if the last modified date of the file has been altered regardless of the change to the content or design. If more than half of the total number of .htm and .html files have a modification date less than 2 years old, then the site is considered to have a majority of the content updated and therefore needs to be made compliant if it is not already.

#### Legacy web technology (created before 2011)

Web technologies related to core academic activities or core university business that have not been created, revised or redesigned after December 31, 2010, are considered legacy technologies and do not need to be revised, unless requested to do so. If a request is made to make a web technology compliant, it must be made compliant within a reasonable timeframe, unless granted an exception. Owners of legacy web technologies are encouraged to either remove web technologies that are no longer used or achieve compliance as soon as it is practicable.

See the above section for the determination if a site has been revised.

The following table identifies the compliance deadlines based on web technology created or revised (i.e., significantly redesigned or a majority of the content updated) within a specific timeframe.

| For a web technology created or revised | Web technology must be compliant               |
|---|--|
| On or after 3/31/13                     | when published                                 |
| between 1/1/11 and 3/31/13              | by 1/1/2015, or a remediation plan established |
| before 1/1/11                           | upon request                                   |

#### **Exceptions**

If a majority of web technologies have not been updated or redesigned for at least two years before the effective date of these standards and guidelines, they do not have to be made compliant, unless requested.

Exceptions to adherence to these standards and guidelines will be granted on an individual basis under several circumstances including, but not limited to, undue hardship or if the use of a reasonable accommodation can provide equal and equitable access. Requests for exceptions must be made to the Accessible Technology Compliance Committee. Note: the financial impact to an individual unit does not constitute an undue hardship.

#### **Monitoring and Enforcement**

Temple University has purchased software to audit web technology and has made this software available to web creators/designers on campus with the expectation that they will regularly audit their web technologies to ensure ongoing compliance as well as effective remediation. In addition to automated scans, manual checks are also required. Periodic general audits will also be conducted in order to assess and ensure overall compliance. The person responsible for the web technology must make a reasonable attempt to make the web technology accessible upon self-discovery, automated scan, or notification by either the Accessible Technology Compliance Committee, or a consumer of the web technology. If the web technology is required for coursework or for essential job functions, a timely review will be carried out by the person responsible for the technology to determine if appropriate alternatives are available and can be implemented. If the remedies cannot be implemented in a timely manner, consideration should be given to removing access to the web technology.

Temple-Related Individuals who encounter inaccessible web technology that hinders their ability to conduct university business or attain academic accessibility should submit this information, including the URL of the inaccessible web technology, to <a href="mailto:TUhelp.temple.edu">TUhelp.temple.edu</a> or <a href="mailto:accessibility@temple.edu">accessibility@temple.edu</a>.

#### **Associated guidelines**

The Accessible Technology Compliance Committee is responsible for developing, reviewing, and approving guidelines to assist individuals who create or purchase web technologies in their efforts to adhere to applicable laws and standards.

#### Part 2: Web Style Guide for Accessibility

This style guide is published in accordance with the Temple University policy on Accessible Information and Technology:

Any information and technology -- such as, but not limited to, computers and ancillary equipment, instructional materials, software, videos, multimedia, telecommunications, or webbased content or products -- developed, procured, maintained, or used in carrying out university activities must be compliant with Sections 504 and 508 of the Rehabilitation Act of 1973, as amended, the Americans with Disabilities Act of 1990, as amended, and other related local, state, and federal laws, as well as other related university policies.

These accessibility standards and guidelines also improve search engine optimization for marketing purposes. To create web sites that are Section 508 and WCAG 2.0 compliant, Temple requires that all university web sites follow these guidelines:

- a) Text and images
- b) Page structure and titles
- c) Links: decoration, purpose, target, naming
- d) Tables
- e) Forms
- f) Equivalent alternatives for multimedia
- g) Keyboard only navigation
- h) Navigation and Skip Navigation
- i) Color: meaning and contrast
- j) Style sheets
- k) Image maps
- I) Frames
- m) Screen flicker and flashing content
- n) Text-only versions of pages
- o) Scripts, Applets and Plugins
- p) Timed responses
- q) Adherence to HTML and XHTML standards

Recommended accessibility standards (optional)

- r) Playback controls
- s) Forced focus

#### (a) Text and images:

- Web pages must use relative sizes for all fonts that are set using CSS (see <a href="typography">typography</a> recommendations).
- Provide a description of all, non-decorative, images in an ALT attribute. It is recommended that you use the guidelines provided at <a href="http://www.w3.org/TR/2012/CR-html5-20121217/embedded-content-0.html#alt">http://www.w3.org/TR/2012/CR-html5-20121217/embedded-content-0.html#alt</a> for creating the alternate text. Developers who need to provide long descriptions may also use ARIA-described by in conjunction with the alt attribute.
- Decorative images should use a null alt tag (alt="").
- If your non-text content is dynamic (i.e. a rotating slider), make sure that equivalents change with the non-text elements. For more information on web accessibility, visit <a href="https://www.w3.org">www.w3.org</a>.
- CAPTCHAs should have multiple output modes to accommodate different disabilities.
- Text should be able to be resized (via browser controls) up to 200% without loss of content or functionality.

#### (b) Page structure and titles

- Web pages must use heading tags in a meaningful and logical sequence, and mark-up language to help text-reading devices interpret the structure of the page.
- The pages must be uniquely titled to describe the purpose or topic of the page (note: it is appropriate to change the title of the page to include "error" if a page is reloaded due to a rejected form submission error.)
- Headings and labels should be used to describe a topic or purpose, and not as a mechanism for text formatting.

# (c) Links: decoration, purpose, target, naming:

- Within the content of a page, web sites must indicate links with either underlining or a clear, consistent font/style/size format that is coded within the CSS.
- Opening links in a new window/tab should be avoided, however if links do need to be open in a
  new window or tab (target="\_blank"), the user must be notified in advance. (There are
  multiple ways to accomplish this, one is using <u>CSS styles</u> and a <span>.)
- Links which go to unique content must be uniquely named on a page (i.e. a page should not contain a series of 'read more' links which have different hrefs.) Multiple links on a page with the same href can share the same name.

#### (d) Tables

- Tables should not be used to structure the visual display, or layout, of the page. CSS should be used instead.
- Use of tables should be limited to displaying data (either essential, or non-essential) within the content block of the page only.
- Caption, Row, and column headers shall be identified for data tables.

 Markup (such as the header, ID, and scope attributes) shall be used to associate data cells and header cells for large data tables, or those that have two or more logical levels of row or column headers.

#### (e) Forms

- All fields in electronic forms shall be appropriately labeled so that people using assistive technology can access the information, field elements, and functionality required for completion and submission of the form.
- Errors for form submissions should be displayed in the page itself and not via a popup window or modal dialog. In addition, the title of the page should be changed to inform the user that an error has occurred.
- If an input error is detected then the item in error is identified and the error is conveyed to the user in text.

#### (f) Equivalent alternatives for multimedia:

- Sound files, applets, etc. must have a text equivalent.
- Video and audio features which are publicly accessible, used for marketing purposes, or instruction must provide captioning, audio descriptions, and/or transcripts according to the multimedia accessibility guidelines.
- Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.
- Captions and transcripts must be at least 95% accurate.

#### (g) Keyboard only navigation

- Web pages must be able to be navigated and all functions accessed by using a keyboard only.
- If focus is moved to a part of the page using the keyboard, it should be able to be moved away as well (that is, the focus should not be trapped).
- The keyboard focus indicator should be visible.

#### (h) Navigation and Skip Navigation

- Navigation must not be dependent on images or JavaScript.
- Skip navigation links (labeled "Skip to main content") shall be provided as the first link keyboard
  and screen readers' access, positioned in the upper right corner of the site, and which is visible
  only with keyboard focus, and to screen readers. For more information on how to use CSS to
  implement screenreader/keyboard only skipnavs visit
  <a href="http://webaim.org/techniques/skipnav/#focus">http://webaim.org/techniques/skipnav/#focus</a>.

#### (i) Color: meaning and contrast

• Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup (i.e. "text marked with an "\*" is required").

- Text must have at least a 4.5:1 contrast with the page background colors (large text, such as 18 point or 14 point bold text, can have a contrast ratio of 3:1); however, purely decorative text does not have to adhere to these contrast requirements.
- Do not put text over patterned backgrounds.

#### (j) Style sheets

• The content of pages must still be readable and usable if CSS is disabled, or if a user overrides the pages style sheet with their own.

#### (k) Image maps

- Client-side image maps are strongly discouraged, but if required they shall be provided instead
  of server-side image maps except where the regions cannot be defined with an available
  geometric shape.
- Server-side image maps are strongly discouraged, but if required then redundant text links shall be provided for each active region of a server-side image map.

#### (l) Frames

 Web pages must not use frames. The content of frames may not be searchable by search engines.

#### (m) Screen flicker and flashing content

- Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
- Content that flashes should not do so more than three times per second, and adheres to the general flash and red flash thresholds.

# (n) Text-only versions of pages

- If a page cannot be made compliant then a text-only page, with equivalent information or functionality, shall be provided to make a web site comply with applicable laws and statutes.
- The content of the text-only page shall be updated whenever the primary page changes.

#### (o) Scripts, Applets and plugins

- When pages utilize scripting languages to display content, or to create interface elements, the
  information provided by the script shall be identified with functional text that can be read by
  assistive technology.
- JavaScript elements must degrade gracefully and must provide the ability to ignore the element.
- The use of Flash and Shockware is strongly discouraged but if they must be used, then they must also gracefully degrade and provide the ability to be ignored without impacting the function or information contained on the site.

- Essential content should not be conveyed using Flash, Shockwave or JavaScript.
- Flash Objects as well as Jquery scripts embedded in the page must take into account accessibility issues relating to hearing disabilities, photo epilepsy and other 508/WCAG 2.0 standards.
- When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet.

#### (p) Timed responses

• When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required. For more information on timing, see the <u>WCAG article</u>.

#### (q) Adherence to HTML and XHTML standards

- The language of the page should be specified via the XHTML standard (and if parts of a page are in a different language, then the language of those parts should be appropriately tagged.)
- Pages should be properly structured and formatted so they pass HTML and XHTML parsing.

#### (r) Playback controls (optional)

- Audio and video content should not begin playback automatically.
- Playback controls should be accessible to screen readers, and usable via keyboard only navigation.
- Volume controls should be available independent of the system volume.
- Moving, blinking, and scrolling content that starts automatically should have a mechanism to pause, stop, or hide it (unless it is part of an essential activity).

# (s) Forced focus (optional)

• Keyboard input focus should not be forced unless it is accompanied by appropriate ARIA markup language so that screen reader users have context for the requested input.

# Part 3: Other relevant policies, standards and guidelines

Accessibility of Information and Technology policy

Multimedia accessibility guidelines