

# IT Accessibility at OSU

## Preamble

Oregon State University is committed to the goal of equal access to information technology and to proactive compliance with our obligations under [Section 504 of the Rehabilitation Act](#) and the [Americans With Disabilities Act](#) (ADA) to insure that all our programs, activities and services, including those provided through information technology, are accessible to persons with disabilities. This document contains guidelines for web page design, hardware, software and multimedia accessibility, to assist the University community in realizing this commitment.

The intent of these guidelines is to promote equal access to university electronic information resources, technologies and services for students, employees, guests and visitors including those with disabilities. The guidelines promote equality of access through design standards for websites and for hardware and software acquisition and development. The ultimate goal of the guidelines is that Oregon State University Web pages, information and services be accessible to the widest possible audience, including users of adaptive, alternate or emerging technologies.

These guidelines are meant to reflect the fundamental principles of equality of opportunity under Section 504 and the ADA. Equality of opportunity means more than equal treatment; it means an equal opportunity to participate, obtain the same result, gain the same benefit, or reach the same level of achievement, and that disparate or separate treatment should be permitted only when necessary for equal opportunity.

The guidelines cover the following specific areas:

- A. Web-based information and services including those associated with courses of instruction, departmental programs, University-sponsored activities, employment, and administration and university services. The specific objective of the web page guidelines is to improve accessibility for all, including those with disabilities.
- B. Hardware, software and multimedia developed, purchased or acquired by Oregon State University. The specific objective of hardware, software and multimedia guidelines is to promote disability access. The focus is on acquisitions and or development occurring after the effective date of the policy.
- C. Environments specific to information technology including classroom and general use computer facilities, on-line instruction, distance learning, employment sites,

libraries and resource centers. The specific objective is that work environments accommodate all users.

Our University aspiration should be community-wide adherence to these guidelines. Exemptions are applicable in [Special Situations](#). (See section below on Special Situations).

These guidelines are drawn from widely accepted and commonly used standards and guidance. For example, many guidelines are modeled upon standards promulgated under Section 508 of the Rehabilitation Act, a federal law that imposes technology access requirements on federal agencies. Although Section 508 standards do not apply to Oregon State University, they are commonly known in the industry and provide useful guidance. These guidelines are also drawn in many instances from standards and guidelines of the World Wide Web Consortium (W3C), an international consortium dedicated to building consensus around Web technologies. Likewise, the W3C standards provide useful guidance. Whenever possible each guideline is immediately followed by a reference to the relevant standard or guidance upon which the guideline is based.

Implementation of these guidelines will help achieve the goal that all individuals have access to information technology associated with administration and services, courses of instruction, departmental programs, and University-sponsored activities.

These guidelines are not intended to and do not create rights independent of those under existing legal requirements; rather, they are intended as a guide to assist the University in complying with existing legal obligations and in achieving the University's goal of creating an accessible, inclusive educational and work environment.

Internal or external users with questions about these guidelines or their implementation should contact Oregon State University's Office of Affirmative Action and Equal Opportunity, (541) 737-3556, 526 Kerr Administration Building, Oregon State University, Corvallis, Oregon 97331-2139.

## **Web Accessibility**

### **Introduction**

This page is a guide to help you understand web accessibility and make web pages accessible. The following is a list of recommendations for web accessibility at OSU. Each guideline links to corresponding accessibility provisions from the [WAI](#) or [Section 508](#).

These links provide more detailed explanation of the guidelines below. For technical assistance or guidance regarding these guidelines, please contact Disability Access Services by phone at 737-4098 or by e-mail at: [Disability.Services@oregonstate.edu](mailto:Disability.Services@oregonstate.edu)



## Guidelines

- A. Use language that is as simple and clear as possible.
  - Guideline References: [W3 \(14\)](#)
- B. Provide text equivalents to all nontext content.
  - Provide a description of all images, sound files, applets, etc. in an ALT TEXT tag. The ALT tag allows you to convey to all users the content and meaning of your page. For example:  
`<IMG SRC="picture.jpg" alt="OSU Library">`
  - If your nontext content is dynamic, make sure that equivalents change with the nontext elements.
  - If your page cannot contain text equivalents within it, consider creating a parallel text-only version of the page as a last resort.
  - Guideline References: [W3 \(1\)](#) | [Section 508 \(a\)](#)
- C. Make sure that text and graphics make sense without color.
  - People who cannot differentiate between colors or who are using devices with noncolor or nonvisual displays will not receive or understand information that relies on color for its meaning. Choose backgrounds that contrast with page text and don't interfere with readability of content. Within the content of a page, it is customary to underline links. In the navigation area of a page, it is acceptable to use a clear, consistent, non-underlined link format such as a specific and distinct font, style, and size.
  - Guideline References: [W3 \(2\)](#) | [Section 508 \(c\)](#)
- D. Don't use frames.
  - Frames are not universally accessible.
  - The content of frames may not be searchable by search engines.
  - Guideline References: [W3 \(12\)](#) | [Section 508 \(i\)](#)
- E. Avoid using server-side image maps.
  - Navigation of pages using server-side image maps requires a mouse, which renders the page inaccessible to most visually impaired users.
  - If used, consider providing a link to an alternate text version or summary.

- Client-side image maps are accessible because the information is stored locally and can be linked to using a text reader.
- Guideline References: [W3 \(9\)](#) | [Section 508 \(f\)](#)

F. Use descriptive links.

- Instead of denoting a link with the words "Click here" or similar phrase, be descriptive when providing links; for example: "further information from the W3C on [Web accessibility](#)."
- Consider allowing such links to stand on their own line or provide an ordered or unordered list of links in HTML.
- Guideline References: [W3 \(13\)](#)

G. Use headings and lists to organize your page and reinforce consistent page structure.

- When possible, use mark-up language (<H1>,e.g.) rather than images or visual cues to emphasize the structure of your page.
- Organize documents so they may be read without style sheets.
- Guideline References: [W3 \(13\)](#)

H. Test pages in multiple browsers, operating systems, and connection speeds.

- Test your pages on older Windows and Macintosh systems in both Netscape and Internet Explorer.
- Pages intended for modem users should be tested for load times on slower connections (56K). A large image that downloads immediately on University computers may take 30 seconds to load on a modem connection.
- Guideline References: [W3 \(6\)](#)

I. Provide alternate routes to information when using interactive technologies.

- Provide captioning and transcripts of audio and descriptions of video.
- Pages that use **Flash**, **Shockwave**, or other interactive elements may not be accessible with older browsers. Provide a link to a text-only or non-interactive version of the information. Use special effects with caution and only with good reason.
- Potential difficulties include:
  - May not work (or will work unpredictably) on different systems
  - Harder to implement and maintain
  - Take longer to download
  - Require users to install plug-ins
  - Text readers and search functions don't support **JavaScript**--not ADA compliant

- Guideline References: [W3 \(1\)](#) | [Section 508 \(a.i\)](#)
- J. Design for device independence.
- Users may not be able to use a mouse or keyboard.
  - Ensure that your site is usable with a keyboard. Generally, if your site works with a keyboard it will also work with screen readers and other inputs devices.
  - Guideline References: [W3 \(9\)](#)



## Accessibility Tips for Designers

### Recommended

- Use high contrast text/background combinations with little or no pattern in background.
- Use proper heading styles to structure a page <H1>, <H2>, etc.
- Use CSS when possible.
- In text, use relative font sizes, e.g. "big," "bigger," "small," "smallest."
- Use "ALT" attributes to describe images

### Strongly Discouraged

- Use of red/green combinations
- Designation of headings by using "Bold" formatting
- Use of absolute font sizes in running text, e.g. "10pt."
- Making navigation or other essential information depend solely on images



## Accessibility Tips For Users

Having trouble with a site? Here are some recommendations to help you find the content you need.

### Browser Settings

- Many browsers allow you to override aspects of a web site's display
- Set a default font size you can easily read
- Set a minimum font size so you can read the smallest text
- Set a default font color that is easily visible to you
- Set a default background color that provides good contrast with the text

- Look in your browser's help menu for shortcut keys to increase text sizes

## Screen Magnifiers

- Programs are available for most platforms that allow you to magnify an area of the screen
- For Windows XP: Built in screen magnifier available at Start > Programs > Accessories > Accessibility > Screen Magnifier
- For Macintosh OSX: Built in screen magnifier available at System Preferences > Universal Access > Turn Zoom On, then use Apple Option + or Apple Option - to change the screen magnification
- Text will also appear larger if you decrease the resolution of your monitor



## Sources

- [Northwestern University Accessibility Recommendations](#)
- [W3 Web Content Accessibility Guidelines 1.0](#)
- [Section 508: Web-based intranet and internet information and applications](#)

Special thanks to [Northwestern University](#) for [their help with this document](#) and their dedication to a usable web.

## Hardware Accessibility

### Introduction

These guidelines are intended to assist the University community, purchasers and vendors in making University information technology fully accessible and usable by persons with disabilities. They are based on proven techniques for the design of universally accessible information systems that can be used by individuals with and without disabilities. For technical assistance or guidance regarding these guidelines, please contact Disability Access Services by phone at 737-4098 or by e-mail at: [DisabilityServices@oregonstate.edu](mailto:DisabilityServices@oregonstate.edu)



### Guidelines

- A. Keys, controls and latches should be easily within reach, identifiable by touch, usable with one hand and easy to manipulate.

- For many people with disabilities, limited dexterity, strength and movement make it difficult or impossible to reach or activate poorly designed hardware features.
  - Activate each control, key or latch to verify that it is easily operated or activated.
  - Guideline References: [Section 508 1194.26 \(a\)](#) | [1194.23\(k\)\(2\)](#)
- B. Keys and controls should be identifiable by touch without activating them.
- Hardware should be usable by all persons, and industry standardization in controls makes identification by touch readily available for most types of equipment. If this feature is not available then equipment should be labeled with appropriate touch identifiable labels.
  - Verify that all necessary controls are easily identifiable by touch alone.
  - Guideline References: [Section 508 1194.26 \(a\)](#) | [1194.13\(k\)\(1\)](#)
- C. If keystroke repeat is supported, the delay between repeat should be adjustable to up to two seconds per keystroke.
- For individuals with limited fine motor dexterity or control, key activation needs to be adjustable to avoid repeated key strokes or improper keystrokes from being entered.
  - Adjust the keystroke timing within with the operating system to insure that appropriate timing intervals are available.
  - Guideline References: [Section 508 1194.26 \(a\)](#) | [1194.23 \(k\)\(3\)](#)
- D. The key or control status should be identifiable by touch, sight or sounds.
- Key or control status should be identifiable in other ways than by visual verification.
  - Test for the appropriate functionality of audio, tactile and visual status indicators.
  - Guideline References: [Section 508 1194.26 \(a\)](#) | [1194.23 \(k\)\(4\)](#)
- E. If touch-screen or touch operated controls are used, they should comply with guidelines 1-4 and allow for the use of alternative input devices.
- Individuals with a variety of mobility related disabilities should be able to fully operate all hardware systems.
  - Verify that hardware controls can be activated effectively or with an alternative input device.
  - Guideline References: [Section 508 1194.26 \(b\)](#)
- F. Alternative forms of user identification should be provided on systems that use biometrics.

- Many forms of biometrics require that users touch or view into the verification device; many individuals with disabilities do not have the capability to operate these types of verification systems.
  - Verify that the user can activate the system without the need to use the biometrics.
  - Guideline References: [Section 508 1194.26 \(c\)](#)
- G. Industry standard ports should be provided for alternative input and output devices.
- To meet the needs of persons with disabilities, the ability to attach a variety of adaptive hardware products is necessary. Adaptive hardware often requires that standard serial and parallel ports be available.
  - Verify that the appropriate ports are present and active on the hardware.
  - Guideline References: [Section 508 1194.26 \(d\)](#)
- H. Full size interface slots should be available for the addition of interface cards.
- It is very common to have to modify the existing hardware components or add additional components in order to meet the adaptive technology needs for the person with a disability.
  - Verify the presence of additional interface card slots in the equipment, and the necessary space to add full height cards to the equipment.
  - Guideline References: [Section 508 1194.26 \(d\)](#)

## Software Accessibility

### Introduction

These guidelines are intended to assist the University community, purchasing agents, vendors and developers in making University information technology fully accessible and usable by persons with disabilities. They are based on proven techniques for the design of universally accessible information systems that can be used by individuals with and without disabilities. For technical assistance or guidance regarding these guidelines, please contact Disability Access Services by phone at 737-4098 or by e-mail at: [DisabilityServices@oregonstate.edu](mailto:DisabilityServices@oregonstate.edu)



### Guidelines

- A. Don't use flashing or blinking text.
  - Guideline References: [Section 508 1194.21 \(k\)](#)
- B. Provide keyboard equivalents for all functions.

- Users with disabilities often rely on the keyboard or another type of alternative input device to navigate a program.
  - Verify that all functions can be performed with a keyboard only, and that documentation is provided on the keyboard alternatives used in the program.
  - Guideline References: [Section 508 1194.21\(a\)](#)
- C. Provide for the full functionality of any operating system's accessibility features and the use of common adaptive hardware and software.
- Users with disabilities often rely on built in accessibility options in the operating system or provided by specialized access software.
  - Verify that the program works effectively with the operating systems accessibility features and test for compatibility with commonly available adaptive hardware and software.
  - Guideline References: [Section 508 1194.21 \(b\)](#)
- D. Insure that the program's focus follows the input focus of the user.
- Many adaptive software products work between the operating system and the software being used. This interaction requires that the program exposes its input elements to the adaptive software so that it can track changes and orientation for the user with a disability.
  - Verify that all program elements are clearly available through the adaptive software product being used. Test the software with a variety of commonly available adaptive hardware and software.
  - Guideline References: [Section 508 1194.21 \(c\)](#)
- E. Provide text labels for all icons, or the selection of text only buttons.
- Graphic content is not readily usable by many persons with disabilities, and many adaptive software products provide access by reading textual elements in the software to the user.
  - Using a screen reader, verify that all relevant icon information is provided.
  - Guideline References: [Section 508 1194.21 \(d\)](#)
- F. Keep program interface and icons consistent throughout the application.
- Consistency of structure and context are crucial for the effective use of a program by many people with disabilities due the additional load created by the addition of adaptive hardware and software to the user experience.
  - Verify that the program interface and use of elements is consistent through the user experience.
  - Guideline References: [Section 508 1194.21 \(e\)](#)
- G. Provide text descriptions for all relevant non-text elements.

- Screen readers access the program interface by providing the user with audio and Braille output of the text elements that it encounters. All program elements, therefore, need to be properly labeled with a text descriptor.
  - Navigate the program using a screen reader to insure that all program elements are properly identified.
  - Guideline References: [Section 508 1194.21 \(f\)](#)
- H. Support user definable color settings system wide, and allow full support for inverted text replacement of highlighting.
- A variety of visual disabilities require the ability to change the color settings of the operating system in order for the program to be used effectively. These color changes must be carried through by the software program being used.
  - Verify that changes in the system presentation settings are maintained by the software program.
  - Guideline References: [Section 508 1194.21 \(g\)](#)
- I. Allow users to adjust or disable automated elements.
- Automated elements can interfere with the effective use of the software for individuals with a variety of processing related disabilities.
  - Verify that automated elements can be adjusted or disabled globally in the program.
  - Guideline References: [Section 508 1194.21 \(h\)](#)
- J. Insure that text and graphics make sense without the use of color.
- Users who can not differentiate between colors or that are using adaptive equipment without a visual display will not receive or understand the color based content.
  - Verify that the application does not use color coding as the sole means of conveying information. Change the display setting of the presentation to high contrast, white on black and black on white to insure that the content retains its meaning.
  - Guideline References: [Section 508 1194.21 \(i\)](#)
- K. Provide visual cues for audio alerts, and audio alerts for visual cues.
- Software programs use both audio and visual cues to convey a variety of information to users as to programs' status. Suitable replacements need to be provided to individuals who can not see or hear this information.
  - Verify that audio alters can be presented visually and that visual alerts can be presented auditorially.

- L. Electronic forms should provide access to the form elements so that they can be completed using adaptive technologies.
  - Users should be able to access the individual form elements in order to complete the forms using their adaptive technologies.
  - Verify that all form fields can be completed using commonly available adaptive technologies.
  - Guideline References: [Section 508 1194.21 \(l\)](#)

## Multimedia Accessibility

### Introduction

These guidelines are intended to assist the University community, purchasers and vendors in making University information technology fully accessible and usable by persons with disabilities. They are based on proven techniques for the design of universally accessible information systems that can be used by individuals with and without disabilities. For technical assistance or guidance regarding these guidelines, please contact Disability Access Services by phone at 737-4098 or by e-mail at: [DisabilityServices@oregonstate.edu](mailto:DisabilityServices@oregonstate.edu)



### Guidelines

- A. Provide a transcript for all audio content in an accessible format.
  - Users with audio processing disabilities need the audio content to be provided in an accessible format. Developers should provide transcripts for the audio content.
  - When a user encounters audio content in any format, a transcript of the content should be available either as a supplemental document or by a hyperlink in the online content.
  - Guideline References: [508 section 1194.22 \(a\)](#)
- B. For any time-based multimedia presentation, a synchronized equivalent alternative presentation should be provided.
  - Time-based multimedia presentations come in many forms such as video, audio or animation. These formats should contain captions or descriptions of the content. The options to add caption to the content vary in quality of text rendering and ease of implementation. Choice should be a compromise between ease of use for the user and the rendering quality.

- Multimedia content in any format should be checked to see if the captions are in sync with the available multimedia.
  - Guideline References: [508 Section 1194.22 \(b\)](#)
- C. Users will be provided methods to control any automated content, i.e. provide controls to start, stop or disable the content.
- Screen readers do not handle animations very well, they monitor screen events. Any animation will be considered a new event and the screen reader will try to interpret the information causing confusion and equipment disruption. Developers should provide methods to start, stop, pause or bypass the content.
  - Check if users can control the multimedia content by starting, stopping, pausing or bypassing the content.
  - Guideline References: [W3C Guideline 7.2](#)
- D. Accessible dynamic content should remain in sync with the dynamic multimedia content.
- If a web page has dynamic content, for example a rolling header, then it should also be available in an accessible format and the accessible format must remain current with the dynamic content.
  - Check that the accessible format remains current with the dynamic content.
  - Guideline References: [508 Section 1194.22 \(b\)](#)
- E. Provide context and orientation information for automated or highly complex content.
- It is possible to attach a text equivalent to multimedia content such as *Flash* describing the design of the movie and its major components. The description should introduce and explain both the purpose of the screen, its layout, keyboard shortcuts and names of the important labels. This assists the user in understanding the content and its context.
  - Verify that the content has an appropriate description.
  - Guideline References: [W3C Guideline 12](#)
- F. Make the tab order logical and consistent with the navigational or visual presentation order of the content.
- Screen readers and audio browsers read from left to right and top to bottom in a line by line format. Users navigate the screen content using a combination of tab and arrow keys. Users expect a logical tab order and to have related elements grouped together in a sequential manner.

- Navigate the content using the tab and arrow keys to verify the consistency and logical order of the content.
  - Guideline References: [W3C Guideline 13](#)
- G. Provide keyboard key to change focus.
- Users can find themselves in situations where they are stuck in a *Flash* or other type of animations without a way to exit. Providing a keyboard shortcut key to exit out of the content is a recommended practice. A reference to keyboard shortcuts is also highly recommended if they differ from the standard OS shortcuts.
  - Verify that a shortcut key is provided and that it performs the required task.
  - Guideline References: [508 Section 1194.21 \(h\)](#)
- H. Provide appropriate text based labels for all the controls.
- Screen readers and audio browsers can read the text in the controls if they are created from system fonts and not bitmaps. Providing labels is recommended for both sighted and visually impaired users as an enhancement to the usability of the content.
  - Check if all controls have appropriate text based labels.
  - Guideline References: [W3C Guidelines 10.2](#) | [12.4](#)
- I. Make looping elements inaccessible to screen readers and audio browsers.
- Looping elements cause screen readers and audio browsers to frequently refresh their presentations. Frequent refresh causes the screen reader to loop back to the beginning of the content loop resulting in an endless cycle. If it is not possible to make them inaccessible, users should be at least able to stop the looping elements.
  - Check if looping elements are inaccessible and if they can be stopped by the user.
  - Guideline References: [508 Section 1194.21 \(h\)](#)
- J. Changes in state of the control should be reflected in the label.
- The state of controls in any multimedia application might change. For example, the speaker icon is used by many applications to show that the application is not muted, and a cross on this icon is used to indicate that the application is muted. Unless the label associated with the control changes, the user might be misled by static labels for the control.
  - Check if labels change with changes in the control presentation.
  - Guideline References: [508 Section 1194.21 \(f\)](#)
- K. Provide alternative SVG images for graphics content.

- [Scalable Vector Graphics \(SVG\)](#) technology offers a number of features to make graphics on the Web more accessible than is currently possible. The images are easier to scale up or down, and are also readily converted to tactile formats. Accessibility requires that the features offered by SVG are correctly used and supported.
- Verify that all images are in SVG format.

## Contacts

Subject	Contact	Phone/Email
Guidelines or Compliance	<a href="#">Office of Affirmative Action and Equal Opportunity</a>	(541)737-3556 <a href="mailto:affirmative.action@oregonstate.edu">affirmative.action@oregonstate.edu</a>
Purchasing Questions	<a href="#">Purchasing</a>	(541)737-4261 <a href="mailto:pacc@oregonstate.edu">pacc@oregonstate.edu</a>
Join Interested Parties List		
Technical Questions		
Web Page Design Making Your Web Pages Accessible Inaccessible Web Pages	<a href="#">Disability Access Services</a>	(541) 737-4098 <a href="mailto:DisabilityServices@oregonstate.edu">DisabilityServices@oregonstate.edu</a>
Contract Services for Creating Accessible Web Pages & Applications	<a href="#">Central Web Services</a>	(541)737-1189 <a href="mailto:cws@lists.oregonstate.edu">cws@lists.oregonstate.edu</a>
OSU TDD Operator		(541)737-4474

## Accessibility Resources

### OSU Departments

#### [Office of Affirmative Action and Equal Opportunity](#)

Responsible for overseeing compliance with Section 504 of the Rehabilitation Act and The Americans With Disabilities Act, responding to complaints of discrimination, and working with administrative units in responding to requests for accommodation from faculty, staff and other employees with disabilities.

### [Disability Access Services](#)

Disability Access Services (DAS) facilitates the success of students with disabilities as well as assisting staff and faculty that work at Oregon State University. DAS promotes and provides education and training to staff, faculty and the campus community. DAS also provides a variety of student services such as note taking, captioning and other assistive technology needs.



## Online Tools

### [W3 Validation Services](#)

Validation services can help you make sure your HTML is properly formed. It checks for syntax errors that could potentially cause users to render your page incorrectly. It is recommended that you always check your markup for validity.

### [aDesigner](#)

This free service will allow you to test web pages and help expose and repair barriers to accessibility and encourage compliance with existing accessibility guidelines, such as Section 508 and the W3C's WCAG.

### [Cynthia @ contentquality.com](#)

Cynthia is a web content accessibility validation solution, it is designed to identify errors in design related to Section 508 standards and the WCAG guidelines. The main purpose of this portal is to educate web site developers in the development Web Based content that is accessible to all. This online test only validates one page at a time. Note this demo will test about one (1) page per minute / per site.

### [Web Accessibility Initiative \(WAI\)](#)

WAI, in coordination with organizations around the world, pursues accessibility of the Web through five primary areas of work: technology, guidelines, tools, education and outreach, and research and development. This initiative is a subset of the [W3C](#).

### [www.Section508.gov](#)

Section 508 requires that Federal agencies' electronic and information technology is accessible to people with disabilities. The Center for Information Technology Accommodation (CITA), in the U.S. General Services Administration's Office of Governmentwide Policy, has been charged with the task of educating Federal

employees and building the infrastructure necessary to support Section 508 implementation. Federal employees and the public can access tools for understanding and implementing the requirements of Section 508 at [www.section508.gov/index.cfm?FuseAction=Content&ID=8](http://www.section508.gov/index.cfm?FuseAction=Content&ID=8).

#### [HTML Writers Guild: AWARE](#)

The HTML Writers Guild AWARE Center (Accessible Web Authoring Resources and Education) serves as a central resource for web authors learning about web accessibility. It contains a comprehensive list geared specifically for web designers who wish to learn more about accessible web authoring.

#### [National Center for Accessible Media](#)

The National Center for Accessible Media is a growing collection of resources for developers and users interested in ways to make rich media accessible to people with disabilities.



## **Relevant Standards Websites**

#### [Section 503 of the Rehabilitation Act of 1973](#)

Any contract in excess of \$10,000 entered into by any Federal department or agency for the procurement of personal property and nonpersonal services (including construction) for the United States shall contain a provision requiring that the party contracting with the United States shall take affirmative action to employ and advance in employment qualified individuals with disabilities.

#### [Section 504 of the Rehabilitation Act of 1973](#)

No otherwise qualified handicapped individual in the United States shall, solely by reason of his or her handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Establishes principle of programmatic access to federally-funded programs. Does not directly address the internet, Web, or information technology, but lays foundation for accessibility to the services ("programs") of federally-funded programs.

#### [Americans with Disabilities Act of 1990 Accessibility Requirements](#)

Entities subject to Title II or III of the ADA must provide effective communication to individuals with disabilities.

#### [USA, Rehabilitation Act Amendments of 1998, Section 508](#)

Requires Federal agencies, or members of the public seeking information or services from a Federal agency, to use electronic and information technology that allows employees with disabilities to have access to and use of information and data that is comparable to the employees without disabilities, unless an undue burden would be imposed on the agency.

Section 508 is a procurement law covering hardware and software.

#### [World Wide Web Consortium \(W3C\)](#)

The W3C is an international industry consortium of approximately 500 organizations.

W3C was created to establish web standards and lead the Web to its full potential by developing common protocols that promote its evolution and ensure its interoperability.



## **Definitions**

### Emerging Technologies

New and developing hardware and software technologies used to store, receive, transmit or otherwise process information.

### [Biometrics](#)

Biometrics is the science and technology of authentication (i.e. establishing the identity of an individual) by measuring the subject person's physiological or behavioral features. The term is derived from the Greek words "bios" for life and "metron" for measure.

### [WCAG](#)

Web Content Accessibility Guidelines.

### [CSS](#)

Cascading Style Sheets (CSS) is a simple mechanism for adding style (e.g. fonts, colors, spacing) to web documents.

## [SVG](#)

Scalable Vector Graphics (SVG) is a platform for two-dimensional graphics. It has two parts: an XML-based file format and a programming API for graphical applications. Key features include shapes, text and embedded raster graphics, with many different painting styles. It supports scripting through languages such as ECMAScript and has comprehensive support for animation.

## **OSU Policy of Nondiscrimination on the Basis of Disability**

It is the policy of Oregon State University to comply with Sections 503 and 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and other applicable federal and state regulations that prohibit discrimination on the basis of disability. The Rehabilitation Act and the ADA require that no qualified person shall, solely by reason of disability, be denied access to, participation in, or the benefits of, any program or activity operated by the University. Each qualified person shall receive the reasonable accommodations needed to ensure equal access to employment, educational opportunities, programs, and activities in the most integrated setting.

For a more complete statement of this Policy's application to various University functions and activities refer to the information on the website of the [Office of Affirmative Action and Equal Opportunity](#).



## **Special Situations**

### **Undue Burden and Non-availability**

The following circumstances may qualify as exemptions from these Guidelines:

- Extreme difficulty or expense (Undue Burden). The conclusion that compliance is unduly burdensome is an institutional decision to be made only in consultation with the Office of Affirmative Action and Equal Opportunity.
- Hardware and software tools specific to a research or development process in which no member of the research or development team requires accessibility accommodations.

- Hardware or software for which no equivalent accessible option is available (Non-availability).



## **Compliance**

The Office of Affirmative Action and Equal Opportunity is responsible for overseeing compliance with regard to state and federal regulations that prohibit discrimination on the basis of disability and require reasonable accommodation. Questions or concerns regarding compliance with these Guidelines, or complaints of discrimination, should be directed to the [Office of Affirmative Action and Equal Opportunity](#).