# CSUSB Web Accessibility Standards and Guidelines

Adopted from CSU ATI Accessibility Requirements, WCAG 2.0 (Level A and AA)\* for use at California State University, San Bernardino\* CSUSB adopted one AAA item from WCAG 2.0, Link Purpose (Link Only), Understanding SC 2.4.9: A mechanism is available to allow the purpose of each link to be identified from link text alone, except where the purpose of the link would be ambiguous to users in general. (Level AAA)

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# Introduction and Scope

Administrative websites must comply with the CSUSB Information Technology (IT) Accessibility Policy and the Web Accessibility Standards and Guidelines. All Electronic & Information Technology that contains information necessary for students, faculty, staff and interested parties to conduct business with the University, and employees of the University to complete required work must comply with the following standards and guidelines. These standards and guidelines apply to all university units including auxiliary units.

The criteria for determining a site’s compliance is a passing score using the approved CSU ATI tool and CSU ATI Accessibility Requirements.

## Standards

### Governance

* The CSUSB ATI Steering Committee oversees the implementation of the CSUSB Web Accessibility Standards and Guidelines, any changes or modification of this document will be reviewed and approved by the CSUSB ATI Steering Committee.
* On an annual basis the CSUSB Web Accessibility Standards and Guidelines will be reviewed and revised as necessary.

### Websites/Applications and Digital Content

* Website owners are responsible for ensuring that websites/applications and digital content are compliant with the CSU ATI Accessibility Requirements and applicable Section 508 requirements.

### Compliance Assessments

#### Websites/Applications

* Automated scans will be run and scores will be reported on quarterly basis.
* The CSUSB ATI Steering Committee, the University Auditor, ADA Compliance Officer, Office of Risk Management, Web Administrator and Web Developer/Content Editor will receive quarterly updates on compliance scores and patterns.
* Manual evaluation audits will be conducted on a sample of identified core websites.
* On an annual basis websites will be evaluated to determine if they are considered a “core” website.

Core websites - have been identified as high traffic websites, critical to student success and/or critical in nature.

Vendor Core website - is classified as a vendor if CSUSB is not the sole proprietor or author of the site. Additionally, a core vendor website is one that has been identified as high traffic website, critical to student success and/or critical in nature.

#### Digital Content

Digital content will be evaluated on an ad hoc basis. Priority is weighted using the same criteria for Websites/Applications.

### Exemptions

Any exemption to these standards requires the review and approval from the University ADA Compliance Officer. Exceptions will be incorporated as part of the annual report and will be reviewed annually.

### Campus Awareness and Training

* The CSUSB ATI Steering Committee is responsible for general communication with the campus community.
* Baseline communications will be established and reviewed by the CSUSB ATI Steering Committee for: new faculty, new staff and the orientation process for students.
* Ongoing training on creating compliant web pages and digital content is available to the campus community.
* The CSUSB ATI Steering Committee will maintain a web-based repository of training materials that are available to the campus community.

## Guidelines

The following requirements are used to determine a website’s accessibility score.

### Section A – Images

All images should contain an alt attribute. Purely decorative images should use the "null" attribute. If an image contains text, the alt attribute should contain that text, unless the alt attribute would be longer than 150 characters. Screen reading software will not read alt attributes longer than 150 characters, including spaces. CSU ATI Requirements will fail alt attributes longer than 150 characters.

1. Non-text content has equivalent text.

(WCAG 2.0 Reference H36 or H37)

1. Images that convey complex content have equivalent text content elsewhere on the page, or provide an aria-describedby property.

(CSU ATI Requirement 2.1a, WCAG 2.0 Reference ARIA 15, H45 or G74)

1. Purely decorative images should have empty alt-text (alt="").

(WCAG 2.0 Reference H67)

1. Images that convey information should not be placed in the CSS.

(WCAG Reference F3)

1. Each <applet> and <object> element should provide a text alternative.

(WCAG Reference H35 or H53)

1. Embed elements should use the <noembed>element.

(WCAG 2.0 Reference H46)

**Best Practice:** Purely decorative images should be placed in the CSS.
(WCAG Reference C9)

**Best Practice:** Images of text should be used to convey information rather than text.
(WCAG 2.0 Reference 1.4.5)

### Section B – Multimedia (Video – Audio)

Digital content produced by the university should meet Section 508 WCAG 2.0 A and AA standards.

1. Captions provided for Video.

(WCAG 2.0 Reference G87, G93)

1. Transcripts should be provided for audio.

(WCAG 2.0 Reference G151)

1. When an audio clip plays for more than 3 seconds, a mechanism should be provided to pause, stop or mute the audio, independent from lowering the system volume.

(WCAG 2.0 Reference G60 or G170)

1. Users should be able to determine what the non-text content is about when the non-text content is time-based media.

(CSU ATI Requirement FLASH, WCAG 2.0 Reference 1.1.1-Non-text Content)

**Best Practice:** Audio descriptions should be provided for prerecorded video.
(WCAG 2.0 Reference G78 or G173 or G8)

### Section C – Color

1. Contrasts between foreground and background colors should have an accessible luminosity contrast ratio.

(WCAG 2.0 Reference G18)

Text and images of text have a contrast ratio of at least 4.5:1. NOTE: if text is 18 point or larger, or 14 point and bold the acceptable contrast ratio is 3.1:1.

1. Information conveyed by color should also be conveyed by context, markup, graphic coding, or other means.

(WCAG 2.0 Reference G14)

### Section D - Information & Relationships

1. With all styles disabled, is color and font information rendered in the browser's default style.

(WCAG 2.0 Reference G140)

1. Semantic elements should be used appropriately to mark up the structure of web content or is another technique used to make the same information accessible.

(WCAG 2.0 Reference G115 and H49, G117)

1. List elements should be used appropriately

(WCAG 2.0 Reference H48)

**Best Practice:** Information conveyed by shape, size, visual location, orientation, or sound should also describe additional information that allows the item to be located and identified.

(WCAG 2.0 Reference G96)

### Section F - Client Side Image Maps

1. Image map area alt-text should describe the link destination correctly.

(WCAG 2.0 Reference H24)

### Section G - Data Tables

1. For tables containing data, are <th> elements should be used in the first row (and first column, if applicable).

(WCAG 2.0 Reference H51)

1. The <th> elements should contain the scope (="col" or ="row") attribute.

(WCAG 2.0 Reference H63)

1. If a data table has a title, it should be contained in the <caption> element.

(WCAG 2.0 Reference H39)

1. The <th> or <caption> elements, or is the summary attribute should not be used for layout tables.

(WCAG 2.0 Reference F46)

1. HTML layout tables should make sense when linearized.

(WCAG 2.0 Reference F49)

### Section H - Complex Data Tables

Summary attributes should be used on complex data tables and provide a deeper explanation of what the table contains and how it is organized.

1. Complex data tables should use id and headers attributes to associate data cells with header cells.

(WCAG 2.0 Reference H43)

1. The summary attribute should be used to briefly explain how to navigate the complex data table.

(WCAG 2.0 Reference H73)

1. The summary attribute if used, should not duplicate the <caption> element.

(WCAG 2.0 Reference H73)

### Section I – Frames

1. Each <frame>, <iframe> element should have a meaningful title attribute.

(WCAG 2.0 Reference H64)

1. Each <frame> element should have equivalent content in a <noframe> element for user agents that do not support frames.

(CSU ATI Requirement)

### Section J – Movement

1. Page should not contain a <marquee> element.

(CSU ATI Requirement)

1. Users should have a mechanism to pause, stop or hide anything moving, blinking or scrolling, that starts automatically and does not stop in less than 5 seconds.

(WCAG 2.0 Reference G4, G11, G186, F4, F7, F16, F47, or F50)

1. Elements should not flash more than 3 times in any 1-second period, unless the flash is below the general flash and red flash thresholds (example: flashing content is sufficiently small and the flashes are of low contrast and do not contain too much red.)

(WCAG 2.0 Reference G19 and G176)

### Section K - Text Only

1. Web pages should not have a text-only version.

(WCAG 2.0 Reference F19)

### Section L – Scripts

1. Information provided by a script should be interpreted by assistive technology (example: JavaScript event cannot execute without user input).

(CSU ATI Requirement)

### Section M - Plug-ins

1. Links should be provided to any special readers or plug-ins that are required to interpret page content.

(CSU ATI Requirement)

### Section N - Form

#### Text Alternatives

1. Images used as submit buttons should have a descriptive alt attribute.

(WCAG 2.0 Reference H36)

1. If used, CAPTCHA should be provided in multiple modalities on the same page.

(WCAG 2.0 Reference G144)

1. If used, CAPTCHA should have a text alternative describing the purpose of the CAPTCHA ("Type the letters spoken in the audio").

(WCAG 2.0 Reference G143)

#### Adaptable (information and structure)

1. Form controls should use <label> elements to associate text labels and, when the <label> element cannot be used, utilize title attributes.

(WCAG 2.0 Reference H44 or H65)

1. The <fieldset> and <legend> elements should be used appropriately to order form controls, if applicable.

(WCAG 2.0 Reference H71)

1. The <optgroup> element should be used appropriately to group related options, if applicable.

(WACG 2.0 Reference H85)

### Navigable

1. The tab order to reach the form and the tab order between form elements should be consistent with the logical order of entering form data.

(WCAG 2.0 Reference C27, G59 or H4)

#### Predictable

1. A change of context should not occur when an element on the page receives focus.

(WCAG 2.0 Reference G107)

1. Users should be advised of the behavior of a component when a user interface component automatically causes a change of context.

(WCAG 2.0 Reference G80)

1. If a page component contains associated text, it should be consistent for each user interface component with the same function.

(WCAG 2.0 Reference G197 and F31)

#### Input Assistance

1. Labels or text instructions should be provided when content requires user input.

(WCAG 2.0 Reference G131 and one of the following G89, G184, G162, G83, or H90)

1. Required fields should be identified to the user.

(WCAG 2.0 Reference H90, G184, G83, SCR18, SCR32)

1. Input that needs to be formatted in a specific manner should have an example of that format provided.

(WCAG 2.0 Reference G84, G85, G89, SCR18, SCR32)

1. When input is invalid, detailed text description of each invalid item should be provided.

(WCAG 2.0 Reference G83, G84, G85, SCR18, SCR32)

#### 3.3.4 Error Prevention (Legal, Financial, Data):

http://www.w3.org/TR/UNDERSTANDING-WCAG20/minimize-error-identified.html

**Reversible:** Submissions are reversible.

**Checked:** Data entered by the user is checked for [input errors](http://www.w3.org/TR/2008/REC-WCAG20-20081211/#input-errordef) and the user is provided an opportunity to correct them.

**Confirmed:** A [mechanism](http://www.w3.org/TR/2008/REC-WCAG20-20081211/#mechanismdef) is available for reviewing, confirming, and correcting information before finalizing the submission.

1. If the web page causes a legal/financial/data transaction, there should be a mechanism for the user to review, change the information or cancel the request.

(WCAG 2.0 Reference G164, G98 or G155)

1. If the web page causes a legal/financial/data transaction and an action will cause information to be deleted, the user should be able to recover the information or provide confirmation before deletion.

(WCAG 2.0 Reference G99, G168, or G155)

1. If the web page causes a legal/financial/data transaction while submitting data, the user should be able to review and correct answers and is confirmation required before submission.

(WCAG 2.0 Reference G98 or G168)

### Section O - Navigable

*CSU ATI Accessibility Requirements specifically requires the use headings and skip navigation. CSUSB requires the use of ARIA landmark regions.*

1. Users should be able to bypass blocks of content that are repeated by using skip navigation links.

(CSU ATI Requirement to use skip navigation, WCAG 2.0 Reference G1 or G124 and 2.4.1 )

1. Heading 1 elements <h1> should be used on each page.

(WCAG 2.0 Reference H69)

1. ARIA landmark are used to identify regions of web pages.

(WCAG 2.0 Reference ARIA 11)

1. The order of the content in the source code should be the same as the visual presentation of the content.

(WCAG 2.0 Reference C27)

**Best Practice:** There should be more than one-way to navigate through a website.

(WCAG 2.0 Reference Must use two: G125, or G64, or G63, or G161 or G126 or G185)

### Section P - Timed Response

1. If a time limit expiration results in the loss of data or access, users should have the ability to turn off, adjust or extend the time limit.

(WCAG 2.0 Reference G133, G198, G180 or SCR16)

**Best Practice:** If there are time limits on reading, users should have the ability to pause, restart or open in a static window/area.

(WCAG 2.0 Reference G4, G198, SCR33, or SCR36)

### Syntax Validation

1. Each page should have a unique and descriptive page title.

(WCAG 2.0 Reference H25 and G88)

1. The language attribute should be used to identify the language used on the HTML page.

(WCAG 2.0 Reference H57)

CSU ATI Requirement

* The web pages should use valid HTML/XHMTL.
* The web page should use valid CSS.

**Best Practice:** The language attribute should be used to identify any changes of languages that occur within the page.

(WCAG 2.0 Reference H58)

### Semantic Requirements

1. Headings should be used to organize content and provide a logical hierarchy.

(WCAG 2.0 Reference H42 and G141)

### ALT Quality Requirements

1. Web pages should combine image and adjacent text link for same resource.

(WCAG 2.0 Reference H2)

1. Alt attribute description should make sense in the context of the page as spoken.

(CSU ATI Requirement and WCAG 2.0 Reference F20, F30, F39, or F67)

### Links Requirements

1. The text of each link should describe where the link goes.

(WCAG 2.0 Reference G91)

1. Links with the same text should not point to different places.

(CSU ATI Requirement)

### Assistive Technology Requirements

1. Users should be able to navigate the page using assistive technology.

(CSU ATI Requirement)

### Other Visual Test Requirements

1. Users should be able to navigate the page using a mouse and keyboard.

(WCAG 2.0 Reference G202, G90, G21, and F10, SCR2)

1. The keyboard focus indicator should be visible by keyboard.

(WCAG 2.0 Reference G149)

1. Columns, page elements, or text lines should not overlap each other when text is enlarged with browser settings.

(WCAG 2.0 Reference G179 and C17)

1. Text can be resized without assistive technology up to 200 percent without loss of content or functionality.

(WCAG 2.0 Reference 1.4.4) http://www.w3.org/TR/UNDERSTANDING-WCAG20/visual-audio-contrast-scale.html

### Site Quality Requirements

1. There should not be any broken links that prevent navigation within the website.

(CSU ATI Requirement)

## Revision Control

Document Title: CSUSB Web Accessibility

Author: Rosa Padilla

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