# About this Checklist (Revised: 4/2019)

This checklist was developed by instructional designers at SUNY Empire State College. It was compiled for instructional designers using a master course model for course development and revision. The guidelines in this document are based on information from [WebAIM.org](http://webaim.org/), [W3Cs WCAG 2.1 guidelines](https://www.w3.org/TR/WCAG21/), [Section 508 of the Rehabilitation Act of 1973](http://www.section508.gov/section-508-standards-guide), [Update of the Section 508 Standards (2017)](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/overview-of-the-final-rule), and used per the copyright and licensing notices below.

1. Example of “how to meet” are not inclusive. The WCAG 2.1 official guidelines provide additional suggestions.
2. WCAG 2.1 levels A and AA are included in this document. Level AAA guidelines are not included.
3. Guidelines that refer to teaching online and are not applicable to the development or revision phase of an online course are noted, but not included for the purpose of this rubric. Links are provided to the applicable guideline.
4. Guidelines that are related to the functions of the Learning Management System, that are beyond an instructional designers’ control, are also not included, but identified as missing with a link to the relevant guideline.
5. Section 508 revised standards that are more specific than current WCAG 2.1 guidelines have been included

References:

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Section 508 of the Rehabilitation Act of 1973 can be found at <http://www.section508.gov/section-508-standards-guide>

# Accessibility Review using WCAG 2.1 and 508 REVISED Standards

**Course Name:**

**Course Number:**

**Instructional Designer:**

**Online Course Coordinator:**

**Developer:**

**Review Date:**

**Additional Notes/Comments (list below any possible accommodations that the Disability Office should be aware of or may need to offer students):**

* List location of any timed quizzes/tests:
* List any online games or labs that require full sensory capabilities:
* List any field visits, interviews or observations that require a student to participate in in-person:
* List any additional comments below:

# Special Note on Publisher Content:

These guidelines also apply to publisher content (DVDs, websites such as mylabs) used in the course, even if optional. Developers should identify what publisher content is being used so it can be checked. Publishers are making progress with accessibility, but at this point many are not fully accessible. If a resource is optional, it is highly suggested that it is not used at this time unless the publisher can guarantee the resource is fully accessible.

# Perceivable: Information and user interface components must be presentable to users in ways they can perceive.

## Guideline 1.1 Text Alternatives: Provide text alternative for any non-text content

| **Guideline** | **QM Standard** | **Guideline Elements** | **Examples of How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 1.1.1 Non-text Content  (Level A) | * 8.3 | * All images, form image buttons, and image map hot spots have appropriate, equivalent alternative text. | Add descriptive alt text to images that convey content. |  |
|  | * 8.3 | * Images that do not convey content, are decorative, or contain content that is already conveyed in text are given null alt text (alt="") or implemented as CSS backgrounds. All linked images have descriptive alternative text. | Add an alt text that states “image has only a decorative purpose”.  If using an image as a link, include a descriptive alt text. |  |
|  | * 8.3 * 8.4 | * Equivalent alternatives to complex images are provided in context or on a separate (linked and/or referenced via longdesc) page. | Describe more complex images in context. Provide reference in the alt text to the location for the longdesc. Example below from <http://www.w3.org/TR/2013/NOTE-WCAG20-TECHS-20130905/G74>  Example 1: Bar chart  There is a bar chart on a Web page showing the sales for the top three salespeople.  The short text alternative says: "October sales chart for top three salespeople. Details in text following the chart:"  The following is in the paragraph immediately below the chart. "Sales for October show Mary leading with 400 units. Mike follows closely with 389. Chris rounds out our top 3 with sales of 350." |  |

## Guideline 1.2 Time-based Media: Provide alternatives for time-based media

NOTE: If the audio or video is designated as an alternative to web content (e.g., an audio or sign language version of a web page, for example), then the web content itself serves as the alternative.

| **Guideline** | **QM Standard** | **Guideline Elements** | **Examples of How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 1.2.1 Prerecorded Audio-only and Video-only (Level A) | * 8.4 | * A descriptive text transcript (including all relevant visual and auditory clues and indicators) is provided for non-live, web-based audio (audio podcasts, MP3 files, etc.). | Include a transcript for any audio only resources. Creating transcripts is covered under the TEACH act. Request a transcript early in the revision process through support staff. |  |
|  | * 8.4 | * A text or audio description is provided for non-live, web-based video-only (e.g., video that has no audio track). | Include a text or audio description that explains what the video is showing for any video-only only resources. The content expert may need to help describe the video content. |  |
| 1.2.2 Captions (Prerecorded) (Level A) | * 8.4 | * Synchronized captions are provided for non-live, web-based video (YouTube videos, etc.) | All videos are accurately captioned. If we do not own the video, follow the procedures for copyright permission to get a copy of the actual file to caption. |  |
| 1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A) | * 8.4 | * A descriptive text transcript OR audio description audio track is provided for non-live, web-based video | This applies if the video does not have an audio track that includes descriptions. It does not apply if the video itself is an alternative to a text resource. |  |
| 1.2.5 Audio Description (Prerecorded) (Level AA) | * 8.4 | * Audio descriptions are provided for all video content. Note: Only required if the video conveys content visually that is not available in the default audio track. | This applies if the video does not have an audio track that includes descriptions. It does not apply if the video itself is an alternative to a text resource. |  |

## Guideline 1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

| **Guideline** | **QM Standard** | **Guideline Elements** | **Examples of How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 1.3.1 Info and Relationships (Level A) | * 8.1 * 8.2 | * Semantic markup is used to designate headings (<h1>), lists (<ul>, <ol>, and <dl>), emphasized or special text (<strong>, <code>, <abbr>, <blockquote>, for example), etc. Semantic markup is used appropriately. | Do not create headings using bold text and font changes alone. Use the appropriate headings (level 1, 2 etc.) for all pages. All lists use markup as well. |  |
|  | * 8.1 * 8.2 | * Tables are used for tabular data. Headings, where necessary, are used to associate data cells with headers. Data table captions and summaries are used where appropriate. | Add captions and headings to Moodle tables using the default editor in Moodle. If you are using an older editor, you may not have those options. |  |
| 1.3.2 Meaningful Sequence (Level A) | * 8.1 * 8.2 | * The reading and navigation order (determined by code order) is logical and intuitive. | Use a tool like the Firefox extension Fangs to determine reading order. |  |
| 1.3.3 Sensory Characteristics (Level A) | * 8.1 * 8.2 | * Instructions do not rely upon shape, size, or visual location (e.g., "Click the square icon to continue" or "Instructions are in the right-hand column"). | Instructions do not rely on visual cues alone. |  |
|  | * 8.1 * 8.2 | * Instructions do not rely upon sound (e.g., "A beeping sound indicates you may continue."). | Instructions do not rely on audio cues alone. |  |

## Guideline 1.4 Distinguishable: Make it easier for users to see and hear content including separating foreground from background

| **Guideline** | **QM Standard** | **Guideline Elements** | **Examples of How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 1.4.1 Use of Color (Level A) | * 8.1 * 8.2 * 8.3 | * Color is not used as the sole method of conveying content or distinguishing visual elements. | Content does not rely on color alone. |  |
| 1.4.2 Audio Control (Level A) | * 8.3 * 8.5 | * A mechanism is provided to stop, pause, mute, or adjust volume for audio that automatically plays on a page for more than 3 seconds. | Check length of any automatic sounds to make sure they last under 3 seconds or have controls if greater than 3 seconds. |  |
| 1.4.3 Contrast (Minimum) (Level AA) | * 8.2 * 8.3 | * Text and images of text have a contrast ratio of at least 4.5:1. | See this contrast checker: <http://webaim.org/resources/contrastchecker/> |  |
|  | * 8.2 * 8.3 | * Large text (over 18 point or 14 point bold) has a contrast ratio of at least 3:1 | See this contrast checker: <http://webaim.org/resources/contrastchecker/> |  |
| 1.4.4 Resize text (Level AA) | * 8.2 * 8.3 | * The page is readable and functional when the text size is doubled. | How to increase font size in Firefox  <https://support.mozilla.org/en-US/kb/font-size-and-zoom-increase-size-of-web-pages> |  |
| 1.4.5 Images of Text (Level AA) | * 8.1 * 8.2 * 8.3 | * If the same visual presentation can be made using text alone, an image is not used to present that text. | Images of text are recreated as html pages, word documents, etc. |  |
| 1.4.11 Non-Text Contrast (Level AA) | * 8.1 * 8.2 * 8.3 | * The visual presentation of User Interface Components and Graphical Objects have a contrast ratio of at least 3:1 against adjacent color(s). | Controls, buttons, and meaningful graphics are distinguishable from the background by people with low vision.  Use this contrast checker: <https://webaim.org/resources/contrastchecker/>  This color code tool might be helpful: <https://html-color-codes.info/colors-from-image/> |  |
| 1.4.13 Content on Hover or Focus (Level AA) | * 8.2 * 8.3 | * If using pointer hover or keyboard focus, they are **dismissable**, **hoverable** (the pointer can be moved over the additional content), and **persistent** (the content is visible until the hover or focus trigger is removed). | If additional content is necessary, either include it in the text, or create an additional document/course item. |  |

# Operable: User interface components and navigation must be operable.

## Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard.

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 2.1.1 Keyboard (Level A) | * 8.1 * 8.2 * 8.3 | * All page functionality is available using the keyboard, unless the functionality cannot be accomplished in any known way using a keyboard (e.g., free hand drawing) | Using the tab key on the keyboard, ensure all content can be accessed without using the mouse. |  |
| 2.1.2 No Keyboard Trap (Level A) | * 8.1 * 8.2 * 8.3 | * Keyboard focus is never locked or trapped at one particular page element. The user can navigate to and from all navigable pages elements. | Using the tab key on the keyboard, ensure all content can be accessed without using the mouse. |  |

## Guideline 2.2 Enough Time: Provide users enough time to read and use content

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 2.2.2 Pause, Stop, Hide (Level A) | * 8.1 * 8.2 * 8.3 | * Automatically moving, blinking, or scrolling content that lasts longer than 5 seconds can be paused, stopped, or hidden by the user. Moving, blinking, or scrolling can be used to draw attention to or highlight content as long as it lasts less than 5 seconds. | Remove automatically moving, blinking, or scrolling content that lasts longer than 5 seconds cannot be paused, stopped, or hidden by the user. |  |
|  | * 8.1 * 8.2 * 8.3 | * Automatically updating content (e.g. automatically redirecting or refreshing a page, a news ticker, AJAX updated field, a notification alert, etc.) can be paused, stopped, or hidden by the user or the user can manually control the timing of the updates. | Fix any redirects, check for scrolling RSS feeds etc. |  |

## Guideline 2.3 Seizures and physical reactions: Do not design content in a way that is known to cause seizures or physical reactions

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 2.3.1 Three Flashes or Below Threshold (Level A) | * 8.1 * 8.2 * 8.3 | * No page content flashes more than 3 times per second unless that flashing content is sufficiently small and the flashes are of low contrast and do not contain too much red. | See link for further clarification. In general avoid flashing content.  <http://www.w3.org/TR/WCAG20/#general-thresholddef> |  |

## Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are.

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 2.4.2 Page Titled (Level A) | * 8.1 * 8.2 | * The web page has a descriptive and informative page title. | HTML pages have titles that accurately represent the content. |  |
| 2.4.3 Focus Order (Level A) | * 8.1 * 8.2 | * The navigation order of links, form elements, etc. is logical and intuitive. | Make sure links are in the order they need to be accessed. |  |
| 2.4.4 Link Purpose (In Context) (Level A) | * 8.1 * 8.3 | * The purpose of each link (or form image button or image map hotspot) can be determined from the link text alone, or from the link text and it’s context (e.g. surrounding paragraph, list item, table cell, or table headers) | Links should be named appropriately. Do not use “click here” or “link”. |  |
|  | * 8.1 * 8.3 | * Links (or form image buttons) with the same text that go to different locations are readily distinguishable. | Providing proper names will help with this. Be specific in naming. |  |
| 2.4.6 Headings and Labels (Level AA) | * 8.1 * 8.2 * 8.3 | * Page headings and labels for form and interactive controls are informative. Avoid duplicating heading (e.g. “More Details”) or label text (e.g. “First Name”) unless structure provides adequate differentiation between them. | Include module numbers for resources and activities. |  |

# Understandable: Information and the operation of user interface must be understandable.

## Guideline 3.1 Readable: Make text content readable and understandable.

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 3.1.1 Language of Page (Level A) | * 8.3 | * The language of the page is identified using HTML lang attribute (<html lang=”en”>, for example). | Any content not in English should have the lang attribute included. |  |
| 3.1.2 Language of Parts (Level AA) | * 8.3 | * When appropriate, the language of sections of content that are different language are identified, for example, by using the lang attribute (<blockquote lang=”es”>) | Any content not in English should have the lang attribute included. |  |

## Guideline 3.2 Predictable: Make web pages appear and operate in predictable ways.

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 3.2.1 On Focus (Level A)  and  3.2.2 On Input (Level A) | * 8.1 * 8.2 * 8.3 | * When a page element receives focus or a user inputs information, it does not result in a substantial change to the page, the spawning of a pop-up window, an additional change of keyboard focus, or any other change that could confuse or disorient the user. | We need to provide notification of a new window opening – can include in the html code for the link. <http://www.w3.org/TR/2013/NOTE-WCAG20-TECHS-20130905/G201> |  |
| 3.2.3 Consistent Navigation (Level AA) | * 8.1 * 8.2 * 8.3 | * Navigation links that are repeated on web pages do not change order when navigating through the site. | Keep resources and activities in modules in the same order. |  |
| 3.2.4 Consistent Identification (Level AA) | * 8.1 * 8.2 * 8.3 | * Elements that have the same functionality across multiple web pages are consistently identified, For example, a search box at the top of the site should always be labeled the same way. | Keep resources and activities in modules with a consistent naming convention - ie. M1 Overview, M2 Overview. |  |

# Robust: Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies.

## Guideline 4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies.

| **Guideline** | **QM Standard** | **Guideline Elements** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- | --- |
| 4.1.1 Parsing (Level A) | * 8.3 | * Significant HTML/XHTML validation/parsing errors are avoided. | Clean up any messy word code and errors in HTML. |  |

# Revised Section 508 – Additional to WCAG 2.1

## HTML

| **508 STANDARD** | **QM Standard** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- |
| §1194.22  (m) 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 that complies with §1194.21(a) through (l). [See Note 2] [See Note 3]  All applets, scripts and plug-ins (including PDF and PowerPoint files, etc.) and the content within them are accessible to assistive technologies, or else an alternative means of accessing equivalent content is provided. This applies to all office documents (word, excel etc.)  **Note 2:** Standalone media players are usually more accessible than embedded media players.  Note 3: A PDF file can be made accessible to screen reader users, but it may be best to include an accessible HTML version of a document instead of or in addition to PDF. Accessible alternatives must be provided for PowerPoint files. | 8.1  8.2  8.3  8.5 | A link is provided in the course information documents under the course materials and resources section to an ITS knowledgebase page where the plug-in can be downloaded.  “This course may require the use of plugins or software to view some content. Please refer to the Empire State College knowledgebase article for information on plugins.”  Check all PDF documents for accessibility.  Check all word processing documents, power points, and spreadsheets for accessibility. |  |

## Scripts, Plug-ins, Java

| **508 STANDARD** | **QM Standard** | **How to Meet** | **Review Comments/Notes** |
| --- | --- | --- | --- |
| § 1194.21  (h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user. | 8.4  8.5 | An alternative means of accessing equivalent content is provided. |  |

Comments: