

American Chemical Society Accessibility Conformance Report

WCAG Edition

(Based on VPAT[®] Version 2.4)

Name of Product/Version: ACS Essentials of Lab Safety for Instructors and TAs

Report Date: April 18, 2024

Product Description:

ACS Essentials of Lab Safety for Instructors and TAs is a 90-minute online course that provides learners with essential, actionable, and sustainable safety training for new lab leaders.

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Notes:

Evaluation Methods Used:

The evaluation was conducted in accordance with the WCAG 2.1 (Level AA) Accessibility Guidelines that cover the Revised Section 508 Accessibility Standards of the Rehabilitation Act.

Initial testing was done between November 20 – December 14 2022, with post-remediation testing completed March 27-April 18, 2024.

The evaluation was conducted in four different operating systems using the following browser/screen reader configurations:

Operating System	Browser	Assistive Technology
Windows OS	Chrome	JAWS 2022
	Firefox	NVDA 2022.3.2
MacOS	Safari	Voiceover
iOS	Safari	Voiceover

The evaluators looked for the presence of relevant accessibility barriers. The evaluation was performed in multiple testing environments outlined in the table above.

The accessibility assessment was executed per the following steps:

- I. Four accessibility experts conducted an overall technical analysis to identify issues of technical compliance that would affect blind, mobility impaired, deaf/hearing impaired and low vision users.
- II. Keyboard accessibility analysis (for mobility and physically challenged users) was conducted by attempting to thoroughly navigate the website through the keyboard, without using a mouse. Voice control testing was also performed.
- III. For deaf and hard of hearing users, testing was performed for proper captioning.
- IV. The web portal's accessibility for low vision users was evaluated: (1) using the screen magnification, palette, and contrast controls provided by the operating systems; (2) using the font resizing capability offered by the browser, (3) using WebAim Contrast Checker, (4) testing reflow by setting the screen width to 1280 pixels and increasing the page zoom to 400%, and (5) testing font sizing.
- V. An expert accessibility evaluator conducted the screen reader testing. The goal was to identify accessibility barriers that are likely to be experienced by users who are blind. The evaluator worked through selected functions using the appropriate screen reader. Any pages found to have screen reader issues were re-examined in interactive sessions with the evaluation team.

Items in the Supports category are coded in one of the acceptable methods outlined by W3C.

Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

Standard/Guideline	Included In Report
Web Content Accessibility Guidelines 2.0	Level A (Yes)

Standard/Guideline	Included In Report
	Level AA (Yes) Level AAA (No)
Web Content Accessibility Guidelines 2.1	Level A (Yes) Level AA (Yes) Level AAA (No)

Terms

The terms used in the Conformance Level information are defined as follows:

- **Supports:** The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Partially Supports:** Some functionality of the product does not meet the criterion.
- **Does Not Support:** The majority of product functionality does not meet the criterion.
- **Not Applicable:** The criterion is not relevant to the product.
- **Not Evaluated:** The product has not been evaluated against the criterion. This can be used only in WCAG 2.0 Level AAA.

WCAG 2.x Report

Note: When reporting on conformance with the WCAG 2.x Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the [WCAG 2.0 Conformance Requirements](#) and [WCAG 2.1 Conformance Requirements](#).

Table 1: Success Criteria, Level A

Notes:

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
1.1.1 Non-text Content (Level A)	Partially Supports	<p>1) Functional images have sufficient text description.</p> <p>2) Exceptions: Unlabeled decorative graphics at the beginning of most slides.</p> <p>3) A small number of slides contain visually hidden text unrelated to the slide contents.</p>	<p>2) Many slides have multiple, non-functional, unlabeled images at the beginning; these are not part of course content or navigation.</p> <p>3) This has been fixed.</p>
1.2.1 Audio-only and Video-only (Prerecorded) (Level A)	Supports		
1.2.2 Captions (Prerecorded) (Level A)	Supports		
1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A)	Supports		
1.3.1 Info and Relationships (Level A)	Partially Supports	<p>Some content appearing as headings is not marked up as such.</p> <p>Some headings are not in a hierarchical order.</p> <p>Incorrect use of list markup in a number of cases.</p>	<p>Some headings are not in a hierarchical order.</p>

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
		Some field labels are not associated with form fields.	
1.3.2 Meaningful Sequence (Level A)	Supports	Most course content is in a meaningful sequence with the exception of a single slide.	Course content is in a meaningful sequence. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
1.3.3 Sensory Characteristics (Level A)	Supports		
1.4.1 Use of Color (Level A)	Supports	A small number of custom styled checkboxes and radio buttons use color alone to indicate selection.	This has been fixed. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
1.4.2 Audio Control (Level A)	Supports		
2.1.1 Keyboard (Level A)	Partially Supports	Interactive controls used throughout the application are keyboard accessible with minor exceptions. Example: Some modal dialogs cannot be dismissed using the Esc key.	
2.1.2 No Keyboard Trap (Level A)	Supports		
2.1.4 Character Key Shortcuts (Level A 2.1 only)	Supports		
2.2.1 Timing Adjustable (Level A)	Supports		
2.2.2 Pause, Stop, Hide (Level A)	Supports		
2.3.1 Three Flashes or Below Threshold (Level A)	Supports		
2.4.1 Bypass Blocks (Level A)	Supports		

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
2.4.2 Page Titled (Level A)	Supports		
2.4.3 Focus Order (Level A)	Supports	<p>After closing some modals, focus is placed at the beginning or end of the course slide and not on the activating element.</p> <p>For some questions, selecting the “Try Again” does not place focus at the start of the question.</p>	Focus order is meaningful. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
2.4.4 Link Purpose (In Context) (Level A)	Supports		
2.5.1 Pointer Gestures (Level A 2.1 only)	Supports		
2.5.2 Pointer Cancellation (Level A 2.1 only)	Supports		
2.5.3 Label in Name (Level A 2.1 only)	Supports	While most controls used throughout the course are correctly labeled, a small number have visible labels that are not included in their accessible labels.	Controls used throughout the course include visible label text in their accessible labels. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
2.5.4 Motion Actuation (Level A 2.1 only)	Supports		
3.1.1 Language of Page (Level A)	Supports		
3.2.1 On Focus (Level A)	Supports		
3.2.2 On Input (Level A)	Supports		
3.3.1 Error Identification (Level A)	Supports		

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
3.3.2 Labels or Instructions (Level A)	Supports	<p>Edit fields are not labeled in a descriptive manner.</p> <p>Some interactive controls are mislabeled.</p> <p>“View All Items” activities do not use consistent language for instructions.</p> <p>Accessibility instructions include muting the audio, which may lead to a less accessible experience.</p>	<p>Some interactive controls (expandable buttons) are referred to as “icons”, “images”, or “tabs” in instructions on the screen. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.</p>
4.1.1 Parsing (Level A)	Supports		
4.1.2 Name, Role, Value (Level A)	Partially Supports	<p>1) A modal message generated by Articulate disrupts screen reader access to the application with some screen readers and browsers.</p> <p>The modal does not get focus when using Voiceover with Safari in iOS and cannot be dismissed. For this reason and others, course content is unavailable for IOS/Safari/Voiceover users.</p> <p>2) The Articulate modal does not get focus when using NVDA or JAWS with Firefox in Windows and cannot be dismissed. Course content is unavailable for users of Firefox and JAWS or NVDA.</p>	<p>1, 2) The Docebo LMS was used for testing this product. Users of other LMS platforms will not encounter these issues.</p>

Table 2: Success Criteria, Level AA

Notes

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
1.2.4 Captions (Live) (Level AA)	Supports		
1.2.5 Audio Description (Prerecorded) (Level AA)	Supports		
1.3.4 Orientation (Level AA 2.1 only)	Supports		
1.3.5 Identify Input Purpose (Level AA 2.1 only)	Supports		
1.4.3 Contrast (Minimum) (Level AA)	Supports	Text elements throughout the application provide sufficient contrast with minor exceptions.	Text elements throughout the application provide sufficient contrast. This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
1.4.4 Resize text (Level AA)	Supports		
1.4.5 Images of Text (Level AA)	Supports		
1.4.10 Reflow (Level AA 2.1 only)	Supports		
1.4.11 Non-text Contrast (Level AA 2.1 only)	Partially Supports	The focus indicator used throughout the application for interactive elements provides sufficient contrast against most background colors. In a few instances the contrast is slightly below the minimum requirement.	The Docebo LMS was used for testing this product. Users of other LMS platforms will not encounter these issues.
1.4.12 Text Spacing (Level AA 2.1 only)	Supports		
1.4.13 Content on Hover or Focus (Level AA 2.1 only)	Supports		
2.4.5 Multiple Ways (Level AA)	Supports		

Criteria	Conformance Level	Remarks and Explanations, December 2022	Progress as of April 2024
2.4.6 Headings and Labels (Level AA)	Supports	Most slides have appropriate heading structure with very minor exceptions.	This improvement shifted the conformance level from Partially Supports in the December 2022 audit to Supports in the April 2024 review.
2.4.7 Focus Visible (Level AA)	Supports		
3.1.2 Language of Parts (Level AA)	Supports		
3.2.3 Consistent Navigation (Level AA)	Supports		
3.2.4 Consistent Identification (Level AA)	Supports		
3.3.3 Error Suggestion (Level AA)	Supports		
3.3.4 Error Prevention (Legal, Financial, Data) (Level AA)	Supports		
4.1.3 Status Messages (Level AA 2.1 only)	Supports		

Table 3: Success Criteria, Level AAA

Notes:

Criteria	Conformance Level	Remarks and Explanations
1.2.6 Sign Language (Prerecorded) (Level AAA)	Not Evaluated	
1.2.7 Extended Audio Description (Prerecorded) (Level AAA)	Not Evaluated	
1.2.8 Media Alternative (Prerecorded) (Level AAA)	Not Evaluated	
1.2.9 Audio-only (Live) (Level AAA)	Not Evaluated	
1.3.6 Identify Purpose (Level AAA 2.1 only)	Not Evaluated	
1.4.6 Contrast (Enhanced) (Level AAA)	Not Evaluated	
1.4.7 Low or No Background Audio (Level AAA)	Not Evaluated	
1.4.8 Visual Presentation (Level AAA)	Not Evaluated	
1.4.9 Images of Text (No Exception) (Level AAA)	Not Evaluated	
2.1.3 Keyboard (No Exception) (Level AAA)	Not Evaluated	

Criteria	Conformance Level	Remarks and Explanations
2.2.3 No Timing (Level AAA)	Not Evaluated	
2.2.4 Interruptions (Level AAA)	Not Evaluated	
2.2.5 Re-authenticating (Level AAA)	Not Evaluated	
2.2.6 Timeouts (Level AAA 2.1 only)	Not Evaluated	
2.3.2 Three Flashes (Level AAA)	Not Evaluated	
2.3.3 Animation from Interactions (Level AAA 2.1 only)	Not Evaluated	
2.4.8 Location (Level AAA)	Not Evaluated	
2.4.9 Link Purpose (Link Only) (Level AAA)	Not Evaluated	
2.4.10 Section Headings (Level AAA)	Not Evaluated	
2.5.5 Target Size (Level AAA 2.1 only)	Not Evaluated	
2.5.6 Concurrent Input Mechanisms (Level AAA 2.1 only)	Not Evaluated	
3.1.3 Unusual Words (Level AAA)	Not Evaluated	
3.1.4 Abbreviations (Level AAA)	Not Evaluated	
3.1.5 Reading Level (Level AAA)	Not Evaluated	
3.1.6 Pronunciation (Level AAA)	Not Evaluated	
3.2.5 Change on Request (Level AAA)	Not Evaluated	
3.3.5 Help (Level AAA)	Not Evaluated	
3.3.6 Error Prevention (All) (Level AAA)	Not Evaluated	

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