WCAG 2.1 A and AA Requirements

|  |  |
| --- | --- |
| **Name of Product** | **HESI** |
| **Date Last Updated** | **March 24, 2020** |
| Completed by | Jay Nemchik (Digital Accessibility Team, Dayton) |
| **Document Description** | This document rates HESI NG according to the W3C WCAG 2.1 A and AA requirements. |
| **Contact for More Information** | Ted Gies Principal User Experience Specialist [ted.gies@elsevier.com](mailto:ted.gies@elsevier.com) [accessibility@elsevier.com](mailto:accessibility@elsevier.com?subject=Accessibility%20and%20ScienceDirect) |
| **Testing Tools and Methods** | **Hands-on keyboard operation Firebug/Code inspection Firefox Web Developer Toolbar (removing style sheets) JAWS 18 on Mozilla Firefox 63 and MS IE 11 on Windows 10 NVDA screen reader v2019.2.1 Wave Extension**  **Color Contrast Analyzer W3C WAI Pages** Elsevier Accessibility Checklist: <http://romeo.elsevier.com/accessibility_checklist/> |
| **Document Sections** | The review document below includes all WCAG 2 A and AA checkpoints and is organized into 6 logical sections:   * Visuals * Keyboard * Headings and Structure * Labeling * Multimedia * Usability |
| **Pages Covered** | **Instructor: Homepage, Waiting Room, Schedule Exam Group, Exam List. Student: Exam Waiting Room, Exam Details, Exam Results, Exam Player, Exam Content, Rationale, Remediation, Recommended Materials, Quiz Pages, Textbook Excerpts** |
| Product Accessibility Statement | Available from the [Evolve Support Center](https://service.elsevier.com/app/answers/detail/a_id/12901/kw/accessibility/supporthub/hesi/) |
| **Note from W3C on Conformance** | <https://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html> **“If there is no content to which a success criterion applies, the success criterion is satisfied.” This VPAT shows such criterion as: "Supports (N/A)"** |
| **Notes/Terminology** | **“AT” stands for Assistive Technology such as screen readers, voice input, etc.** |

| **WCAG 2.1 Success Criterion** | **Level** | **Evaluation** |
| --- | --- | --- |
| 1.1.1: Non-text Content | A | Partially supports |
| 1.2.1: Audio-only and Video-only (Prerecorded) | A | Does not support |
| 1.2.2: Captions (Prerecorded) | A | Does not support |
| 1.2.3: Audio Description or Full Text Alternative | A | Does not support |
| 1.2.4: Captions (Live) | AA | Supports (N/A) |
| 1.2.5: Audio Description | AA | Does not support |
| 1.3.1: Info and Relationships | A | Partially supports |
| 1.3.2: Meaningful Sequence | A | Partially supports |
| 1.3.3: Sensory Characteristics | A | Partially supports |
| 1.3.4 Orientation (2.1) | AA | Supports |
| 1.3.5 Identify Input Purpose (2.1) | AA | Supports (N/A) |
| 1.4.1: Use of Color | A | Supports |
| 1.4.2: Audio Control | A | Supports |
| 1.4.3: Contrast (Minimum) | AA | Partially supports |
| 1.4.4: Resize text | AA | Partially supports |
| 1.4.5: Images of Text | AA | Supports |
| 1.4.10 Reflow (2.1) | AA | Partially supports |
| 1.4.11 Non-Text Contrast (2.1) | AA | Partially supports |
| 1.4.12 Text Spacing (2.1) | AA | Partially supports |
| 1.4.13 Content on Hover or Focus (2.1) | AA | Supports (N/A) |
| 2.1.1: Keyboard | A | Partially supports |
| 2.1.2: No Keyboard Trap | A | Supports |
| 2.1.4 Character Key Shortcuts (2.1) | A | Supports (N/A) |
| 2.2.1: Timing Adjustable | A | Supports |
| 2.2.2: Pause, Stop, Hide | A | Supports (N/A) |
| 2.3.1: Three Flashes or Below Threshold | A | Supports (N/A) |
| 2.4.1: Bypass Blocks | A | Partially supports |
| 2.4.2: Page Titled | A | Partially supports |
| 2.4.3: Focus Order | A | Partially supports |
| 2.4.4: Link Purpose (In Context) | A | Supports |
| 2.4.5: Multiple Ways | AA | Supports |
| 2.4.6: Headings and Labels | AA | Supports |
| 2.4.7: Focus Visible | AA | Supports |
| 2.5.1 Pointer Gestures (2.1) | A | Supports (N/A) |
| 2.5.2 Pointer Cancellation (2.1) | A | Supports (N/A) |
| 2.5.3 Label in Name (2.1) | A | Supports |
| 2.5.4 Motion Actuation (2.1) | A | Supports (N/A) |
| 3.1.1: Language of Page | A | Supports |
| 3.1.2: Language of Parts | AA | Supports (N/A) |
| 3.2.1: On Focus | A | Supports |
| 3.2.2: On Input | A | Supports |
| 3.2.3: Consistent Navigation | AA | Supports |
| 3.2.4: Consistent Identification | AA | Supports |
| 3.3.1: Error Identification | A | Partially supports |
| 3.3.2: Labels or Instructions | A | Partially supports |
| 3.3.3: Error Suggestion | AA | Supports |
| 3.3.4: Error Prevention (Legal, Financial, Data) | AA | Supports (N/A) |
| 4.1.1: Parsing | A | Supports |
| 4.1.2: Name, Role, Value | A | Partially supports |
| 4.1.3 Status Messages (2.1) | AA | Does not support |

|  |  |  |
| --- | --- | --- |
| **Visuals** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.1.1: Non-Text Content](http://www.w3.org/TR/WCAG20/#text-equiv-all) (A) Provide text alternatives for non-text content (e.g. images) | Partially supports | Most images and icons include text equivalents.  **Exceptions:**  The hamburger icon does not have any button text.  Schedule Exam Group: The 'X' close button needs a label, as a title on the SVG is not sufficient.  Exam Content: The following calculator buttons need plain text labelling for them to be properly read out by assistive technology ( \* . - / ). There are question types that rely on the information provided in images, and these images do not have sufficient alternative text for users to be able to answer the questions. Audio player buttons are sometimes images with no alt text.  Exam Results: The table legend icons (Acceptable, Recommended, National Average, Class Average) do not have any alternative text when used in the table itself.  Recommended Materials: The bullet and checkmark icons used to designate material progress need alt text (alt="Incomplete", alt="Completed"). |
| [1.3.3: Sensory Characteristics](http://www.w3.org/TR/WCAG20/#content-structure-separation-understanding) (A) Do not rely on sensory characteristics of components such as shape, size, visual location, orientation, or sound | Partially supports | Most content does not rely on sensory characteristics.  **Exceptions:**  Exam Content: Image hotspot questions ask the user to pick a specific spot on an image; this requires use of visual location, and no alt text or image regions are applied to the image.  The instructions for adjusting volume refer to the "lower right-hand corner of the player", referring to spatial location. The volume button is not labelled, so the instructions are not supplementary. |
| [1.4.1: Use of Color](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-without-color) (A) Color is not used as the only visual means of conveying info | Supports | Color is not used as the only means of conveying information for content. |
| [1.4.3: Color Contrast (Minimum)](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-contrast) (AA) Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text) | Partially supports | Most text has enough contrast with its corresponding background.  **Exceptions:**  The gray text (#969696) on light gray background in the footer does not have enough contrast at 2.71:1.  Combinations of white/orange text does not pass at 3.07:1.  Exam Results: Several instances of white text on orange background (#E9711C) does not have enough contrast at 3.07:1. Placeholder text such as "Search by student last name" on the Instructor Exam Room (#E5E5E) is especially light and can be difficult to make out for some users.  Recommended Materials: The small gray text for number of minutes (#737373) on light gray background (#F5F5F5) does not have enough contrast at 4.3:1 (Recommend using #707070 as the lightest gray that passes on that background color). |
| [1.4.4: Resize Text](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-scale) (AA)  Text can be enlarged up to 200% without loss of functionality. | Partially supports | Text can be enlarged to 200% and content remains functional.  **Exceptions**:  Exam Player: Text size cannot be adjusted in the secure browser. |
| [1.4.5: Images of Text](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-text-presentation) (AA) Text is used rather than images of text, except where the presentation of text is essential, such as logos | Supports | No images of text are used other than for Logos or essential presentation. |
| [1.4.10 Reflow](https://www.w3.org/TR/WCAG21/#reflow) (AA) Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:  Vertical scrolling content at a width equivalent to 320 CSS pixels;  Horizontal scrolling content at a height equivalent to 256 CSS pixels. | Partially supports | HESI uses a responsive view that properly scrolls in only one direction once width reaches low CSS pixels.  **Exceptions:**  The secure browser does not allow for text or browser window resizing, thereby causing the checkpoint to fail. |
| [1.4.11 Non-Text Contrast (AA](https://www.w3.org/TR/WCAG21/#non-text-contrast)) User interact components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s). | Partially supports | Most non-text UI components and graphical objects have at least a 3:1 contrast ratio.  **Exceptions:**  Exam Content: The "Play Audio" button does not have enough contrast with 2.04:1 at its darkest color. |
| [1.4.12 Text Spacing (AA)](https://www.w3.org/TR/WCAG21/#text-spacing)  In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all the following and by changing no other style property:  Line height (line spacing) to at least 1.5 times the font size;  Spacing following paragraphs to at least 2 times the font size;  Letter spacing (tracking) to at least 0.12 times the font size;  Word spacing to at least 0.16 times the font size. | Partially supports | The site allows users to adjust the text spacing without causing loss of content or functionality.  **Exceptions:**  The secure browser does not allow for any CSS manipulation, so the text spacing of the exam player cannot be adjusted. |
| [1.4.13 Content on Hover or Focus (AA)](https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus)  Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:   * Dismissable * Hoverable * Persistent | Supports | There is no content that appears on hover or focus. |
| [2.3.1: Three Flashes or Below Threshold](http://www.w3.org/TR/WCAG20/#seizure-does-not-violate) (A) No more than three flashes in a 1-second period, or the flashes are below the defined thresholds | Supports (N/A) | No flashing content exists. |
| **Keyboard** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.3.2: Meaningful Sequence](http://www.w3.org/TR/WCAG20/#content-structure-separation-sequence) (A)  The correct reading sequence can be programmatically determined | Partially supports | The correct reading sequence is logical with the DOM order matching the visual order.    **Exceptions:**  Exam Content: There is a bunch of visually hidden content repeated in the middle of the page which is very confusing for screen reader users. |
| [2.1.1: Keyboard](http://www.w3.org/TR/WCAG20/#keyboard-operation-keyboard-operable) (A)  All functionality is available from a keyboard, except for tasks such as drawing | Partially supports | Most content is keyboard operable.  **Exceptions**:  Schedule Exam Group: Parts of the Calendar widget itself cannot be reached with keyboard such as the arrows to move between months. Users cannot reach the calendar widget after activation.  Exam List: The Exam names cannot be activated by keyboard.  Exam Player: Users with screen readers seem to be blocked entirely from entering the page.  Exam Content: The sequencing question type cannot be completed with keyboard alone (users cannot move the sequencing tiles around with the keyboard). The Image hotspot question type cannot be completed with keyboard (users cannot select a spot on the image, and therefore cannot submit the question at all). Users cannot navigate the radio button or checkbox inputs with the keyboard (Due to visibility hidden). The audio/video player has controls that cannot be reached by keyboard.  Exam Results: The Print button cannot be reached by keyboard. |
| [2.1.2: No Keyboard Trap](http://www.w3.org/TR/WCAG20/#keyboard-operation-trapping) (A)  The user can use the keyboard to move through page elements and is not trapped on a particular element | Supports | No keyboard traps exist on any page. |
| [2.1.4 Character Key Shortcuts (A)](https://www.w3.org/TR/WCAG21/#character-key-shortcuts)  If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:   * Turn off * Remap * Active only on focus | Supports (N/A) | The site does not use any character key shortcuts. |
| [2.4.3: Focus Order](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-focus-order) (A)  Users can tab through the elements of a page in a logical order | Partially supports | Tab order is logical on the site for the most part.  **Exceptions**:  Homepage: The tab controls have two duplicate tabstops, which should be reduced to one.  Schedule Exam Group: The calendar button should place user's focus into the calendar widget upon activation. Focus should be placed onto the error summary, since the page moves up to view the errors.  Exam Content: The calculator content is not adjacent to the actual show/hide button in the DOM.  Instructor Exam Room: Ellipses menu items (Force complete, Pause, Resume) should come after the actual button not after the footer elements. The navigation spine should act like a dialog box and restrict focus until it is closed. |
| [2.4.7: Focus Visible](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-focus-visible) (AA)  The page element with the current keyboard focus has a visible focus indicator | Supports | All elements use a fantastic visible focus.  Note:  Quiz Pages: Consider changing the focus for the "Next Question" button after feedback. |
| [3.2.1: On Focus](http://www.w3.org/TR/WCAG20/#consistent-behavior-receive-focus) (A)  When a UI component receives focus, this does not trigger unexpected actions. | Supports | Focusable elements do not cause unexpected actions when receiving focus. |
| **Headers and Structure** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.3.1: Information and Relationships](http://www.w3.org/TR/WCAG20/#content-structure-separation-programmatic) (A)  Info, structure, and relationships can be programmatically determined | Partially supports | Good use of headings to appropriately structure content for the most part. HTML5 tags and roles are used in several areas to create landmarks.  **Exceptions:**  Sets of related links should be cast as unordered lists such as the navigation links. Tables (e.g. Student Registered Exams) have headers correctly identified but the role="button" gives the tables incorrect semantics and incorrect screen reader experience. The table headers should also be given scope attributes (scope="row/col").  Instructor Homepage: "Manage exam settings…" text should be an h3. The Proctor Launch button does not have an associated table header.  Exam List: The h1 and h2 on the page should not be the same text (h2 maybe should be "Exam List" or similar). 'Filter' should be an h2 instead of an h3, and the subsequent h4s should be h3s.  Exam Content: There is no heading structure at all. E.g. “Question 1 of 9” should be a H1 heading. Question text should be a heading. Tables are sometimes used in the exams and are not marked up as tables at all.  Instructor Exam Room: Current h4s on the room should be h2s.  Student Homepage: The welcome message should not be a heading. Exam name under Register for Exams should be h4 as it is under a h3 heading.  Schedule Exam Group: The Exam name heading at the top of the dialog should not be an h3 (likely an h1).  Remediation: There should only be one h1 on the page. The test name should be an h2, and the Essential/Recommended headings should be h3s.  Recommended Materials: A <header> tag should not encompass the Exit button.  Quiz Pages: Do not use <header> tag to encompass the breadcrumb (<nav> should work). Question # of # headings in the post-assessment screen should be h2s instead of h4s.  Textbook Excerpts: Add heading markup to the textbook pages. Apply row table headers and proper scope attributes to tables. Consider adding role="presentation" to the tables used for layout (or preferably remove them entirely and use standard HTML markup). |
| [2.4.1: Bypass Blocks](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-skip) (A)  Users can bypass repeated blocks of content. | Partially supports | Headings exist, which allow users using Assistive Technology to jump to the different areas of content quickly. A "skip" link also exists to help keyboard users jump past repetitive navigation.  **Exception:**  The Skip to Main Content link does not work when used with screen readers. |
| [2.4.6: Headings and Labels](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-descriptive) (AA)  Headings and labels are clear and consistent. | Supports | Headings and labels used are clear and descriptive. |
| [3.1.1: Language of Page](http://www.w3.org/TR/WCAG20/#meaning-doc-lang-id) (A)  The language of the page is specified | Supports | The language is defined as lang="en". |
| [3.1.2: Language of Parts](http://www.w3.org/TR/WCAG20/#meaning-other-lang-id) (AA)  Specify the language of text passages that are in a different language than the default language of the page. | Supports (N/A) | None of the site-wide UI or functionality uses a different language than the default. |
| [4.1.1: Parsing](http://www.w3.org/TR/WCAG20/#ensure-compat-parses) (A)  Use valid, error-free HTML | Supports | HTML and CSS passes concerning these 4 specific criteria:  (i) elements have complete start and end tags,  (ii) elements are nested according to their specifications  (iii) elements do not contain duplicate attributes (iv) any IDs are unique, except where the specifications allow these features. |
| **Labeling** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.3.5 Identify Input Purpose (AA)](https://www.w3.org/TR/WCAG21/#identify-input-purpose) The purpose of each input field collecting information about the user can be programmatically determined when:  The input field serves a purpose identified in the Input Purposes for User Interface Components section; and the content is implemented using technologies with support for identifying the expected meaning for form input data. | Supports (N/A) | There are no pages on HESI that have input fields for personal data. |
| [2.4.2: Page Titled](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-title) (A)  The page has a title describing its topic or purpose | Partially supports | Page titles change dynamically and are usually descriptive.  **Exceptions:**  Schedule Exam Group is missing a title. |
| [2.4.4: Link Purpose (In Context)](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-refs) (A)  The purpose of each link can be determined from the link text or surrounding context. | Supports | Links used have an identifiable purpose from the link text or surrounding context. |
| [2.5.3 Label in Name](https://www.w3.org/TR/WCAG21/#label-in-name) (A)  For user interface components with labels that include text or images of text, the name contains the text that is presented visually. | Supports | User interface components that have visible text contain that text consistently within the accessible name.  Note: Several UI components do not have the visible text as the first part of the accessible name. |
| [3.2.4: Consistent Identification](http://www.w3.org/TR/WCAG20/#consistent-behavior-consistent-functionality) (AA)  UI components used across the web site are identified consistently on every page. | Supports | UI components are consistent across the site. |
| [3.3.1: Error Identification](http://www.w3.org/TR/WCAG20/#minimize-error-identified) (A)  Input errors are clearly marked and described to the user. | Partially supports | Errors are given and described well when scheduling an exam group. The Exam group settings error state is announced to screen readers as an alert. An exception occurs in the Content.  **Exceptions:**  Exam Content: For the fill-in-the-blank question, either provide error text next to the input that describes if a user has entered invalid characters or ensure that instructions are given programmatically that let users know that only numeric characters are allowed.  Schedule Exam Group: Include the error text in the label if possible. If that cannot be done, apply aria-describedby="[ID of error text]" to the input element.  Quiz Pages: The feedback for the questions should be read out to screen readers. |
| [3.3.2: Labels and Instructions](http://www.w3.org/TR/WCAG20/#minimize-error-cues) (A)  Items requiring user input are clearly labeled or have clear instructions. | Partially supports | Most input areas have clear labels which are programmatically assigned.  **Exceptions:**  Schedule Exam Group: The start and end time select inputs do not have any labels. The toggle checkboxes for timing an exam, calculator, and providing remediation should describe what is being toggled. The Exam Length number input and Remediation number input do not have any labels.  Instructor Exam Room: Select menu "sort by" needs a proper label. The Search by student last name input needs proper label.  Exam Content: The Fill-in-the-Blank input does not have any label text (use the question text). Radio and checkboxes are not labelled.  Exam Results: All three select inputs on the page do not have associated labels.  Quiz Pages: The Fill in the Blank inputs need to use the question text as a label. |
| [3.3.3: Error Suggestion](http://www.w3.org/TR/WCAG20/#minimize-error-suggestions) (AA)  When the user makes an input error, give suggestions for valid input. | Supports | The error text given is sufficient for error suggestions. |
| [4.1.2: Name, Role, Value](http://www.w3.org/TR/WCAG20/#ensure-compat-rsv) (A)  For all UI components, the name, value, and role can be programmatically determined. | Partially supports | Most UI components communicate their state programmatically.  **Exceptions:**  The mobile hamburger button is missing button text.  Remove the role="button" from all table headers.  Schedule Exam Group: Apply aria-describedby="[ID of accompanying time slot text]" to each remove link.  Calendar buttons are not labelled and do not describe their function of opening the calendar UI.  Exam Content: Consider following the aria tablist ruleset for tabs. <http://www.w3.org/TR/wai-aria-practices/examples/tabs/tabs.html>.  Apply a role="region" to the containing element for the calculator and give it an aria-label="Calculator".  Instructor Exam Room – The open/close titles with individual student progress are a role="button" with tabindex=”0”. This results in the entire student card announced as one string. This combined with the nesting of the ellipses button is confusing. The area should be recast as a region role and the ellipses button has no accessible name and illogical tab order. The open/close student accordions should also be given aria-expanded="true/false".  Exam Results: The Email button does not have any button text. The Print element should be a button. The slider needs proper labelling and should follow proper authoring practices for ARIA sliders.  Student Home: Tables headings are tab stops, announced as buttons and only the Start time is a usable sort mechanism. The semantics are not right because table headings are given a role="button". The sort button needs to be parsed out of the <th> otherwise role semantics and table reading will be off.  Remediation: Each remediation packet tile (containing div) should have role="region" with aria-labelledby="[id of resource title]".  Recommended Materials: Add aria-expanded="true/false" to the accordion menus. |
| [4.1.3 Status Messages](https://www.w3.org/TR/WCAG21/#status-messages) (AA)  In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus. | Does not support | There are a few status messages that appear visually on the site, and they are not announced to screen readers.  Some dynamic messages, e.g. "Error removing scheduled exam", "successfully registered for exam" are not read out as alerts to screen readers. |
| **Multimedia** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.2.1: Audio-only or Video-only (Prerecorded)](http://www.w3.org/TR/WCAG20/#media-equiv-av-only-alt) (A)  Provide alternatives for pre-recorded audio-only or video-only content. | Does not support | There is pre-recorded audio-only content in the exams that does not have any alternatives. |
| [1.2.2: Captions (Prerecorded)](http://www.w3.org/TR/WCAG20/#media-equiv-captions) (A)  Provide captions for pre-recorded audio | Does not support | There is pre-recorded audio in the exams, and they do not have any captions.  There are video supplements in the remediation that do not have captions. |
| [1.2.3: Audio Description or Media Alternative (Prerecorded)](http://www.w3.org/TR/WCAG20/#media-equiv-audio-desc) (A)  Provide alternatives for pre-recorded synchronized audio/video | Does not support | There is pre-recorded synchronized media in the exams and remediation videos, and they do not have any provided alternatives. |
| [1.2.4: Captions (Live)](http://www.w3.org/TR/WCAG20/#media-equiv-real-time-captions) (AA)  Provide captions for live audio in synchronized audio/video. | Supports (N/A) | There is no live audio in synchronized audio/video. |
| [1.2.5: Audio Description (Prerecorded)](http://www.w3.org/TR/WCAG20/#media-equiv-audio-desc-only) (AA)  Provide an audio description of pre-recorded video. | Does not support | There are pre-recorded videos in the exam and in the remediation videos, and they are not given an audio description. |
| [1.4.2: Audio Control](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-dis-audio) (A)  Audio can be paused and stopped, or the audio volume can be changed. | Supports | There is pre-recorded audio in the exams, and the audio can be paused and stopped, as well as muted. There is no audio that plays automatically on the site. |
| [2.2.2: Pause, Stop, Hide](http://www.w3.org/TR/WCAG20/#time-limits-pause) (A)  Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information. | Supports (N/A) | There is no moving, blinking, scrolling, or auto-updating information. |
| **Usability** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [2.2.1: Timing Adjustable](http://www.w3.org/TR/WCAG20/#time-limits-required-behaviors) (A)  Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended | Supports | There is a session time out for instructors which are shorter than 20 hours, and there is a notification given through the title as well as a popup dialog for extension.  There are time limits in the exam, but they are necessary for the exam itself and warnings are given beforehand.  **NOTE:**  Students who are in an exam will experience an auto pause feature, but have the ability to Resume the exam, which then requires the instructor to use the resume function. |
| [2.4.5: Multiple Ways](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-mult-loc) (AA)  More than one way is available to navigate to other web pages. | Supports | Users can reach all pages in the system using the global navigation.  Content pages can be reached through the global nav or homepage. |
| [3.2.2: On Input](http://www.w3.org/TR/WCAG20/#consistent-behavior-unpredictable-change) (A)  Changing the setting of a checkbox, radio button, or other UI component does not trigger unexpected changes in context. | Supports | User inputs do not cause unexpected actions for most content. |
| [3.2.3: Consistent Navigation](http://www.w3.org/TR/WCAG20/#consistent-behavior-consistent-locations) (AA)  Navigation menus are in the same location and order on every web page. | Supports | Navigation menus are consistently in the same place and in same order. |
| [3.3.4: Error Prevention (Legal, Financial, Data)](http://www.w3.org/TR/WCAG20/#minimize-error-reversible) (AA)  For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted. | Supports (N/A) | There are no submissions which require legal or financial commitments. |
| **Mobile User Experience** | | |
| **WCAG 2.1**  **Checkpoint** | **Supporting Features** | **Remarks** |
| [1.3.4 Orientation](https://www.w3.org/TR/WCAG21/#orientation)  (AA) Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential. | Supports | HESI does not restrict its view to a single orientation. |
| [2.5.1 Pointer Gestures](https://www.w3.org/TR/WCAG21/#pointer-gestures) (A) All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential. | Supports (N/A) | HESI does not use any multipoint or path-based gestures. |
| [2.5.2 Pointer Cancellation (A)](https://www.w3.org/TR/WCAG21/#pointer-cancellation)  For functionality that can be operated using a single pointer, at least one of the following is true:   * No Down-Event * Abort or Undo * Up Reversal * Essential | Supports | All interactive content functions through the Up-Event, allowing users to potentially move their pointer off the component to cancel. |
| [2.5.4 Motion Actuation (A)](https://www.w3.org/TR/WCAG21/#motion-actuation)  Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:   * Supported Interface * Essential | Supports (N/A) | There is no content on HESI that utilizes device or user motion. |