

# Accessibility Report Matrix: View Grades

4/9/05

(please see Appendix A for detailed issues descriptions and recommendations)

**Issue Severity Key:**  
**1** = Issue makes use of the application impossible or nearly impossible. In other words it is an accessibility "showstopper"  
**2** = Issue makes use of the application extremely difficult  
**3** = Issue makes use of the application difficult or annoying  
**4** = It would be nice if this issue were resolved, but not critical

#	Check	Source			Affects						Rating (+,-, /)	Severity (1 most - 4 least)	Comments	
		508	W3C	CAP	Blind	Vision Impaired	Color Blind	Motor	Cognitive	Deaf				
<b>Tables</b>														
1	Large blocks of text should not be laid out in columns using tables unless the application being evaluated is for an internal audience (newer versions of JAWS can handle text laid out in columns, but we can only assume an internal audience would have a newer version)		P3	X	X	*						+		N/A
2	Data tables should have row and column headers and be navigable in JAWS (tables used for layout should not have headers)	(g,h) X	P1	X	X	*						+		OK
3	Tables used for layout should make sense when linearized. Note: A layout table recognized as a layout table will always be read left to right, top to bottom and so should make sense being read in this manner.		P2	X	X	*						+		OK
4	Blank cells are not filled with "&nbsp;" in data tables, but with either invisible text (i.e. background-colored text) or a transparent image. Blank cells with "&nbsp;" do not matter for layout tables. Note that cells should not be completely empty either, for reasons of browser compatibility. Applications that are for internal audiences may skip this check since newer version of JAWS have solved this problem.			X	X	*						+		N/A
<b>Forms</b>														
5	Form fields that are required should be displayed as such in an accessible manner -- starred, indicated by a word, or pointed out at submission by a JavaScript popup (only for short forms). Bold or colored field labels are not an accessible means of indicating required fields.	(n) X	P3	X	X	*	X					+		N/A
6	Form fields that are required should display notification prior to the field, rather than after	(n) X		X	X	*						+		N/A

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7	Forms fields that need labels are immediately to the right of their fields and/or are available when the JAWS users enter forms mode.	(n) X	P2	X	X	*							+		OK
8	An alternative way of submitting the information on the form (phone numbers, etc.) should be indicated on the same page.			X	X	X	X	X	X	X			-	2	The "Contact Us" link is too general to provide a user with a contact who can retrieve student records.
<b>Images</b>															
9	Decorative or spacer graphics with no other purpose (does not include graphical list bullets) should have ALT tags filled with "&nbsp;".		P1	X	X	*							+		OK
10	All other images tags should have intuitive ALT tags (includes graphical list bullets, graphical representations of text, clickable image maps, and animations). Images used for navigation should be described according to their target.	(a) X	P1	X	X	*							+		OK
11	ALT tags should not consist of only a single character or a repeated single character ("&nbsp;" is okay to use).			X	X	*							+		OK
12	Client-side image maps should be used in place of server-side image maps wherever possible	(f) X	P2	X	X	*							+		OK
13	Server-side image maps should have redundant text links for each active region	(e) X	P1	X	X	*							+		OK
14	Pages should not contain animation that loops more than three times, or pages provide a means to freeze the animation.		P2						X				+		OK
15	Design of page should not cause screen to flicker.	(j) X	P1	X					X				+		OK
16	Animated images should refresh at a rate outside of the range of 2 Hz to 55 Hz.	(j) X	P1	X					X				+		OK
<b>Content</b>															
17	All information conveyed with color is also available without color. Don't rely exclusively on color as an indicator (example "Negative amounts are indicated in red")	(c) X	P1	X	X		X						+		OK
18	Lists that need to be numbered or that have items that are referred to by number later should not be numbered using the <OL> tag			X	X	*							+		OK
19	Target of each link should be clearly identified (no "click here" or "more...")		P2	X	X	*							+		OK
20	Page organization and hierarchy should be conveyed using intended html (e.g. "<h2>" instead of "<b><font size='5'>")		P2	X	X	*						/	2.5	- Page headings could be indicated with the <h-> tags.	
21	Heading (<h1>, <h2>) tags should not be used for font effects, but only for hierarchy		P2	X	X	*							+		OK
22	Expansion of each abbreviation or acronym in a link is indicated using the HTML "title" attribute of the <ABBR> or <ACRONYM> tags. [Note: If it is felt that it would be too difficult to go back to applications and add acronym tags if/when they are supported for text, perhaps acronyms should be required for all text despite the fact JAWS cannot utilize them now. Also note that acronym tags can be helpful for search engines and users of some new browsers]		P3	X	X	*							+		OK
23	Indication of the meaning of each acronym or abbreviation should appear in the main content of the page when it first appears.		P3	X	X	X	X	X	X	X	X		+		OK

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24	There should be enough contrast between the background and overlying text so that all text and diagrams are readable. Busy backgrounds should not be used.		P2/P3	X		X	X					+		OK
25	Design should accommodate resizing text -- if a user changes the size of the text, the design should not be broken in such a way that makes the content of the page difficult to read or incomprehensible. Table widths should be resizable where possible.		P2	X		X		X				+		OK
26	Text and background, images, etc. all should be understandable by a color blind user.	(c) X	P2	X			X					+		OK
27	Style of presentation is consistent across pages (i.e. menus in the same place on each page, colors, logos, graphics have a similar theme, etc.).		P3	X	X	X	X	X	X	X		+		OK
28	Charts (pie charts, bar graphs, etc.) should link directly to a page with a description of the information (<longdescr> does not work for this).	(a) X	P1	X	X	*						+		N/A
29	"Mailto" links should use the <ACRONYM> tag to spell out the email address if it is not actually in the name of the link.			X	X	*						+		OK
30	PDF content should be available in an alternative format (plain text or HTML). Where this is not available, an alternative method of submitting the form should be offered.			X	X	*						+		OK
<b>Coding</b>														
31	If navigation links are repetitive, the user should be provided with a means to skip through the navigation	(o) X	P3		X	*		X				+		OK
32	If applets or plug-ins are required for use of the application, all content within them should be accessible	(m) X	P1/P2	X	X	X	X	X	X	X		+		OK
33	Current window should not be changed without informing the user. Links that open new windows should be indicated		P2	X	X							+		OK
34	Coding, and/or style-sheets should not prevent the user from resizing text or changing text color		P2	X		X		X				+		OK
35	The use of the following deprecated tags should be avoided: U, FONT, APPLET, ISINDEX		P2	X	X	X		X				+		OK
36	Scripting should not impair a user's ability to complete needed tasks	(l) X	P1	X	X	X	X	X	X	X		-	1.5	- The skip-to graphics for the "Academic Year" and "Term" combo boxes should be introduced with an explanation in the code that they are being used as an alternative to the combo box. AND/OR For the combo boxes there should be an explanation on how to use the "Alt" key to select options in the code.
37	Pages should be navigable without the use of a mouse.		P2	X	X	*		X				+		OK
38	A logical tab order should be given through links, form controls, and objects		P3		X	*		X				+		OK
39	Keyboard shortcuts should be provided to important links or controls where necessary	X	P3	X				X				+		OK
40	Frames should be used only for compelling reasons and if used, are labeled and navigable.	(i) X	P2	X	X	*		X		X		+		OK
41	Pages should not automatically refresh, or if they do, a means should be provided to stop the auto-refresh.		P2	X	X	*		X	X			+		OK
42	Pages that are redirected should either provide the user with a means to stop the redirect or should be redirected using server configuration (therefore the redirect is almost invisible to the user)	(p) X	P2	X	X	*		X	X			+		OK

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43	The <BLINK> and <MARQUEE> tags should not be used			X				X			+		OK
44	Any sounds or music imperative to understanding the content of a page should be offered in an alternative format (for example, the narration of a video clip is offered as text, or an alert sound indicating something of importance is emphasized in text as well)	(b) X	P1	X					X		+		OK
45	Other comments/issues											4	The <ALT> tags for the skip-to images at the tops of the pages do not need the "[Access key = #]" notes, as Jaws indicates these automatically.
46												2	The skip-to images at the top of the "Complete Record of Grades" page for Alt+1 and Alt+4 do not link to anything.
47												2.5	The skip-to images at the top of the "Help" page do not link to anything on the page and are not needed.
48												1	By the default JAWS settings, JAWS does not read punctuation, creating inaccurate grade reporting. E.g. "B-" is read as "B."
50												3.5	Printer-friendly page is not accessible to Jaws.
51												1	The image for the background stripes causes Jaws to lock up.

# “View Grades” Accessibility Report

## Appendix A: Detailed Issues Description

### Issue Severity Key:

- 1 = Issue makes use of the application nearly impossible. In other words it is an accessibility “showstopper”
- 2 = Issue makes use of the application extremely difficult
- 3 = Issue makes use of the application difficult or annoying
- 4 = It would be nice if this issue were resolved, but not critical

### Issues:

1. **Issue: (See matrix, #8)**

**Severity = 2**

The “Contact Us” link presents the user with a page containing options for searching university online resources and general phone numbers for the University campuses.

**Why is this an issue?**

A user with a disability that prevents him/her from independently using the “View Grades” pages may find it difficult or impossible to locate a phone number for assistance.

**Recommendation**

Provide a direct link to contact information for a department or advisor who can assist with the student’s transcript.

2. **Issue: (See matrix, #20)**

**Severity = 2.5**

The section headings on the View Grades pages are not read as headings by a screen-reader.

**Why is this an issue?**

The hierarchy and organization of the pages may not be evident to a user accessing the site with a screen-reader. For example, on the “Grades by Term” page, someone using a screen-reader hears “Grades by Term” (a heading), followed by “Grades by Term” (a link). The user may be confused by the repetition of “Grades by Term” without the inclusion of the HTML heading tag.

## Grades by Term

Grades by Term | [Complete Record of Grades](#) | [Done](#) | [Help](#)

### **Recommendation**

Use appropriate heading tags to indicate the page and section headings.

### 3. **Issue: (See matrix, #36)**

#### **Severity = 1.5**

The purpose of the “skip to” graphics, as an alternative to the combo box used to select academic years and terms should be explicit.

#### **Why is this an issue?**

Screen-reader users may be confused by the use of the “skip to” graphics as an alternative to the subsequent combo box. If screen-reader users attempt to use the combo boxes, they may not be aware of the method for preventing the automatic launching of the next or previous choice when using the up and down arrows to scroll through the selections. In other words, simply using the up and down arrows when in a combo box will highlight and then launch the next or previous selection in the list — which the user may not have intended to visit.

#### **Recommendation**

Prior to the “skip to” graphics, include an explanation that they may be used as an alternative to using the subsequent combo boxes in selecting a term to view.

In addition, provide brief instructions on navigating combo boxes for screen-reader users. JAWS users will need to press enter when on the combo box to turn forms mode on. JAWS users must then press alt+down arrow to “open” the combo box and allow scrolling without automatically launching a selection. Pressing alt+up arrow will close the combo box and launch the selection. This is a screen-reader feature that many users are not aware of.

### 4. **Issue: (See matrix, #45)**

#### **Severity = 4**

The <alt> tags for the skip-to images at the tops of the pages should not include the “[Access Key = #]” note.

***Why is this an issue?***

JAWS automatically announces access key information. When access key information is included in an alt tag, a screen-reader will announce something like “Access Key = # Alt+#.”

***Recommendation***

Remove the “[Access Key = #]” from the <alt> tags and include one or more of the following:

- a. Underline the appropriate letter in the visual label on the graphic as a means of indicating the access key to visual users, such as those with mobility impairments.
- b. Include the “access key = #” in the title element for the graphic, which will display the information in the status line and will not be read by screen-readers by default.

5. ***Issue: (See matrix, #46)***

**Severity = 2**

The skip-to image links at the top of the “Complete Record of Grades” page for Alt 1, skip past header, and Alt 4, skip to main content, are broken links.

***Why is this an issue?***

Screen-reader users and users with motor impairments may be confused or frustrated when the link does not take them to the content specified.

***Recommendation***

Restore functionality of the skip-to links at the top of the “Complete Record of Grades” page.

6. ***Issue: (See matrix, #47)***

**Severity = 2.5**

All of the skip-to images on the “Help” page are broken links.

***Why is this an issue?***

Screen-reader users and users with motor impairments may be confused or frustrated when the link does not take them to the content specified.

***Recommendation***

Restore functionality of the skip-to image links.

7. **Issue: (See matrix, #48)**

**Severity = 1**

Screen-reader users may have punctuation reading set to “none” or “some,” which may result in inaccurate grade reporting.

**Why is this an issue?**

Screen-readers will not read the plus or minus signs attached to letter grades. For example, a grade of “B-“ will be read as “B.”

**Recommendation**

Instruct screen-reader users that punctuation reading must be set to “most” or “all” for accurate grade reporting. JAWS users should press INSERT+V to display the JAWS verbosity menu. Then, press the letter “p” until “punctuation” is announced. Pressing the space bar will change the selection. Note: By using this method of changing punctuation verbosity, closing JAWS or the browser will return this setting to its default.

8. **Issue: (See matrix, #50)**

**Severity = 3.5**

The printer-friendly transcript on the “Print Unofficial Transcript” page is not accessible with a screen reader.

**Why is this an issue?**

Printer friendly” pages often provide a cleaner view — by eliminating navigational icons/controls and other extraneous elements — for screen-reader users, users with low-vision, and users with cognitive/information tracking impairments.

**Recommendation**

Include a note, such as “This view is for printing purposes only and is not screen-reader accessible.”

9. **Issue: (See matrix, #51)**

**Severity = 1**

The tiling of the background image (stripes) may cause JAWS to freeze.

**Why is this an issue?**

Unless users have “picture loading” disabled in Internet Explorer, JAWS will attempt to process the image each time it is tiled, causing JAWS to slow down and quickly freeze —requiring the user to reboot the computer.

### **Recommendation**

Use a style sheet (CSS) to load and tile the background image. For example,  
.BackgroundImage {BACKGROUND-IMAGE:  
url(Graphics/BackgroundImage.jpg); BACKGROUND-REPEAT: repeat-x}

### **Summary of Recommendations:**

(generally prioritized)

- ❑ Add a note in the “Instructions” section code of the “Grades by Term” and “Complete Record of Grades” pages instructing users to set JAWS to read “most” or “all” punctuation while checking their grades. **(see 8)**
- ❑ Correct the broken links for the skip-to links at the top of the “Complete Record of Grades” page. **(see 5)**
- ❑ Use a style sheet (CSS) to load and tile background images. **(see 10)**
- ❑ Prior to the skip-to graphics, add an explanation for screen reader users that they may be used as alternatives to the subsequent combo boxes for selecting terms. Include directions for screen-reader users on how to navigate the combo boxes without automatically launching a selection. **(see 3)**
- ❑ Provide a direct link to contact information for a department or advisor who can assist with transcripts. **(see 1)**
- ❑ Restore the functionality of the skip-to image links on the “Help” page. **(see 6)**
- ❑ Remove the “[Access Key = #]” from the <alt> tags of the skip-to image links. Underline the appropriate letter in the visual label on the graphic as a means of indicating the access key to visual users, such as those with mobility impairments. Include the “access key = #” in the title element for the graphic, which will display the information in the status line and will not be read by screen-readers by default. **(see 4)**
- ❑ Use heading tags to indicate the page and section headings. **(see 2)**

### **For questions or comments on this document, please contact:**

[Name]

[Role, Department]

[Organization]

Phone: [Phone Number]

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