Accessible Informational Material & Technology Adoption/Procurement Checklist

Requestor	Marcus Pomper		
Department/Unit	Math Science	AIMT Reviewer	Bruce Botts / Matthew Ward
Product Name	Webassign		
Product Version	12ed		
Product Vendor	Cengage		
Vendor Contact	Michele Bruno		
Vendor Contact Email	michele.l.bruno@cengage.com		
Vendor Contact Phone	5183482449		
IMT Users	Student		
IMT Usage	Students will use productst to take exams		
Cost	(estimate the amount of this acquisition or if this	s is an adopted product with no cost)	
Step 1 Gather Informat	ion for Review	-	Initial all appropriate boxes or N/A
Standards Conformance	•		
	at Conformation and Demodication Formation		
Technical standards used (in order of	nt, Conformance and Remediation Forms	and Vendor Documentation	MP
			-
Web Content Accessibility Guid	elines 2.0 A & AA		MP
EPUB3 Accessibility Guidelines			MP
Section 508 & VPAT			MP
Market Analysis for Standa			
	icable requirements are conformant		NA
One product meets more applic	cable requirements than the others (attack	n supporting analysis)	NA
Product previously purchased a	nd may be conformant (e.g., LMS contract)		NA
Only one product meets applica	able requirements (e.g., sole source)(attach ju	stification)	MP
General Exemptions to Cor	nformance Guidelines		
Only Administrative Execut	tive can authorize an exemption		
No accessible alternative IMT (N	Must have Alternative Access Plan)		MP
Note: For an AIMT adoption/procurement	to be authorized, it must have a completed checkl	ist.	11011 0 0 00
Requestor	my Tivo	Da	nte NOV 0 3 2017
Signature required to certify accuracy	and completeness of the checklist and conform	mance.	
Step 2 Review by Depar	tment Accessibility Liaison		Initial all appropriate boxes or N/A
Accessibility Review Docum	nent Completed		ВВ
Attached Alternative Access Pla	•	1.	
	The receded	ARAND.	BB /2/20
AIMT Reviewer	1,50		ite
Accessibility Liaison	Sign here only when ready	to forward to step 3	,
Step 3 Adoption or Proc	curement		Initial all appropriate boxes or N/A
Adoption Completed			(Initials & Date)
Buyer AIMT Procurement C	Checklist Completed		(Initials & Date)
	th department liaison and Purch	asing (if applicable)	(Initials & Date)
Accessibility Liaison		(ii applicable)	(mittals & Date)
Final Signature	Appendiate Vice President Appro		nte <u>//////</u>

^{*} applicable requirements are essential/prefered functionallity

Alternate Access Plan

Purpose of the Alternate Access Plan

In compliance with Section 504 of the Rehabilitation Act of 1973 and ADA as amended in 2008, the TBR shall apply THEC's identified accessibility guidelines to Informational Materials and Technology products and services that it adopts, buys, creates, uses and maintains. When informational materials and technologies do not conform to those guidelines, an alternative access plan will be developed to address the accessibility. This form is used to describe the alternate access plan.

Instructions

- 1. Alter the bolded areas in brackets ([]) to reflect the titles of the responsible persons for this plan.
- 2. The requesting department Accessibility Liaison/Accessibility Team is responsible for completing sections 1 through 3 below.
- 3. The requesting department will obtain the appropriate administrative approvals in section 4.
- 4. The appropriate administrator will either a) approve the form and return it to the requesting department for processing or b) return the form unsigned. An unsigned form indicates the plan is not approved and must be revised to meet accessibility standards.
- 5. The [department executive administrator] or designee is responsible for returning the approved original document along with all associated AIMT adoption/procurement documents to the department Accessibility Liaison upon signature. The liaison will provide copies to those individuals identified in section 3, number 3 (Responsible Person(s) and upload all AAP documentation to the AIMT Web Form.

Section 1. Plan Creator Information

Name Markus Pomper	Title Dean	Unit Division of Math and Science	Date
Office Phone x 4233	Office Location D106A	Postal 276 Patton Lane,	Harriman, TN 37748

Section 2. Description of the Affected Informational Material and Technology Purchase

Affected product is a:	Textbook Webcompanion
Product Name:	Webassign Cengage
Product Description:	Webbased Companion to adopted textbook, includes algorithmically generated problems, graphics, and link to textbook
Product Purpose:	Assign homework, quizzes, and tests at instructor discretion.

Section 3. How will "Alternate Access" (AA) be provided?

Description of the issue: Summarize what part of the informational material/technology has an accessibility issue and is not accessible per AIMT guidelines.	Website is largely accessible. There are several instances where students are asked to interpret a graph (e.g., determine the coordinate of a displayed point, or determine whether the graph touches or transverses the x-axis at its intercept). In these instances, an alternative textual description would provide the answer to the question. Interpretation of graphical data is one component of mathematical work, and cannot be reasonably excluded from the course.
Persons or groups affected: List the person(s) or groups who may/will be affected by this issue, including the total number of affected persons. (general public, visitors, students only, employees, etc.).	Students registered in MATH 1730
3. Responsible person(s): List the name(s) and titles of the employee(s) who will be responsible for implementing equally effective alternate access for the specified accessibility issue as described in Number 1.	Tracey Watson, Disability Coordinator
4. How will AA be provided: Describe in detail how the responsible unit(s)/person(s) equally effective alternate access will be communicated and what will be provided. Attach a separate sheet – see AAP attachment below and the Accessibility Conformance and Remediation Form.	Alternative arrangements must be made on a case-by-case basis, taking into consideration the student's degree of visual impairment. These may include the use of suitable tactile representations of the material, the use of an interpreter, or the use of alternate assignments, as appropriate.
5. AA Resources Required: List any resources required (including training, equipment, additional staff, etc.) to provide alternate access for the known issue.	Depending on the chosen remediation strategy, an interpreter may be needed. This person would need to be trained in providing verbal descriptions of graphs. It may also be necessary to purchase tactile equipment that can "display" graphical information.
Repair Information: Include the following information in this section: a. Provide a brief description or any relevant information regarding repair of the issue by the vendor or Third Party Service Provider, as well as the completion date. Attach applicable documentation and the Accessibility Conformance and Remediation Form.	The vendor has provided us with a list of problems that they deem to be in accessible format. If additional problems are to be used, we are asked to communicate the problem number to the publisher for prioritization of repair.
7. Timeline for Unforeseen events: A timeline to plan create, implement, and follow up on plans for accommodation for access concerns/issues that are beyond the accessible procurement process and/or outside of the realm of the questions above.	

Section 4. Administrative AAP Approvals

Section 4. Administrative AAT Approvais				
By signing this request, you affirm that the plan has been reviewed and is	an acceptable solution that meets TBR AIMT Accessibility Guidelines.			
Department Head [or other responsible party]	ln AM	Date:	NOV 0 3 2017	
Executive [or other responsible executive]	Clandbud	Date:	11/7/17	
			. / / /	

Accessibility Conformance and Remediation Form

Instructions

This form serves as means for auditors and vendors to document accessibility gaps associated with AIMT products and to indicate plans for addressing these gaps in the future.

We ask that you complete the **form** provided on the next page as follows:

- 1. Product/Vendor Information: Provide the information requested
- 2. Issue Description: List each major accessibility issue for the product Including the following:
 - o Gaps identified from the WCAG 2.0 A & AA guidelines, Voluntary Product Accessibility Template (VPAT) and EPUB3 Accessibility Guidelines (if applicable)
 - Gaps identified in other product support documentation
 - Gaps identified by a third-party accessibility evaluation report (if available)
- 3. Current Status: Enter one of the following values:
 - o Open: The issue has not yet been resolved
 - o Closed: The issue has already been resolved
 - I/P: The issue is currently under investigation
 - Other
- 4. **Disposition:** Enter one of the following values:
 - Planned: The issue will be resolved
 - Deferred: The issue will not be resolved
 - I/P: The issue is currently under investigation
 - Other
- 5. Remediation Timeline: Enter when you anticipate that the issue will be resolved
- 6. **Available Workarounds (for vendor only)**: Describe the business processes vendor will offer or third-party products that should be considered to work around the issue until full remediation.
- 7. Comments (optional): Provide details/description regarding the issue
- 8. Additional Information (optional): Provide any additional discussion regarding accessibility plans

Vendor/Product Information

Vendor Name	Cengage Learning
Product Name	Swokowski Precalculus: Functions & Graphs
Product Version 12 th Edition ISBN 9780840068576; also used for custom versions 9781133441786 and	
	9781133441793
Completion Date	Jan 2017
Contact Name/Title	Michele L. Bruno/Director, Accessibility Program. Gary Whalen, Product Owner.
Contact Email/Phone	Michele.l.bruno@cengage.com/518.348.2449.

Specific Issues

Issue Description	Current Status (Open, Closed, I/P)	Disposition (Planned, Deferred, I/P)	Remediation Timeline	Available Workarounds	Comments
Enhanced WebAssign	Open	Deferred	n/a	Partnership with WA is needed to create a compliant course.	
Within Enhanced WebAssign the book pages provided in the homework (via Read It link) are flash based and thus not compliant.	Open	Deferred	1/2017	Provide PDFs of text	Not likely to be addressed since we are moving to a new ebook within a new platform.
No standalone ebook is available	Open	Deferred	N/A		
Problem-specific videos ("Watch It" videos within Enhanced WebAssign) lack captioning and transcripts	Closed		1/2017	Transcripts created.	Thousands of such videos exist.

Additional Information:

Instructor Resources:

PPTs exist but are not accessible. There are no current plans to make these accessible for c2018.

Textbook as well as the Complete Solution Manual have a PDF alternative format readily available via accesstext.org. ePub3 format available by request.

VPAT located on Cengage.com/accessibility.

NOTE: Accessibility questions can be directed to accessibility@cengage.com.

Web Assign - Dr. Pomper

Web Content Accessibility Guidelines 2.0 Checklist

Principle 1: Perceivable – information and user interface components must be presentable to users in ways they can perceive.

andard Description	Apply Yes/No	Meets Yes/No	Comments (mandatory)
nideline 1.1 Text Alternatives: Provide text alternatives for any non-ranged into other forms people need, such as large print, braille, special. Non-text Content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A). Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.) Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.) Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.	Yes/No text conten	Yes/No t so that i ols or simp	(mandatory)
 CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology. 			

1.2.1	Audio-only and Video-only (Prerecorded): For prerecorded audio-			
	only and prerecorded video-only media, the following are true,			
	except when the audio or video is a media alternative for text and			
	is clearly labeled as such (Level A)			
	is clearly labeled as such (Level A):			
	 Prerecorded Audio-only: An alternative for time-based media 	No		
	is provided that presents equivalent information for	/ Va		
	prerecorded audio-only content.	-		
	Prerecorded Video-only: Either an alternative for time-based			
	media or an audio track is provided that presents equivalent			
	information for prerecorded video-only content.			
1.2.2	Captions (Programmed),			
1.2.2	Captions (Prerecorded): Captions are provided for all prerecorded	. 1		
	audio content in synchronized media, except when the media is a	NO		
	media alternative for text and is clearly labeled as such. (Level A)	/ -		
1.2.3	Audio Description or Media Alternative (Prerecorded): An			
	alternative for time-based media or audio description of the			
	prerecorded video content is provided for synchronized media,	No		
	except when the media is a media alternative for text and is clearly	1.0		
	labeled as such. (Level A)			
1.2.4				
1.2.4	Captions (Live): Captions are provided for all live audio content in	No		
4.0.5	synchronized media. (Level AA)	100		
1.2.5	Audio Description (Prerecorded): Audio description is provided for	No		
	all prerecorded video content in synchronized media. (Level AA)	טען		
1.2.6	Sign Language (Prerecorded): Sign language interpretation is			
	provided for all prerecorded audio content in synchronized media.			
	(Level AAA)			
1.2.7	Extended Audio Description (Prerecorded): Where pauses in		-	
	foreground audio are insufficient to allow audio descriptions to			
	convey the conce of the video cortex ded and in the circuit			
	convey the sense of the video, extended audio description is			
	provided for all prerecorded video content in synchronized media.			
	(Level AAA)			
1.2.8	Media Alternative (Prerecorded): An alternative for time-based			
	media is provided for all prerecorded synchronized media and for			
	all prerecorded video-only media. (Level AAA)			
1.2.9	Audio-only (Live): An alternative for time-based media that			
	presents equivalent information for live audio-only content is			
	provided. (Level AAA)			
Guideli			16	
James	ine 1.3 Adaptable: Create content that can be presented in differ	rent ways	(for exam)	ple simpler
	without losing information or structure.			
1.3.1	Info and Relationships: Information, structure, and relationships	1	V	
	conveyed through presentation can be programmatically	100	les	
1.2.2	determined or are available in text. (Level A)			
1.3.2	Meaningful Sequence: When the sequence in which content is	V	V.	
	presented affects its meaning, a correct reading sequence can be	:21	105	
1.3.3	programmatically determined. (Level A)	,		
1.5.5	Sensory Characteristics: Instructions provided for understanding	V.	Vac	
	and operating content do not rely solely on sensory characteristics of components such as shape size visual legiting orientation	165	405	
	of components such as shape, size, visual location, orientation, or sound. (Level A)			
TATES SEEDS TO THE LAND SERVICE.	Method Control			
Caldelli	ne 1.4 Distinguishable: Make it easier for users to see and hear o	content in	cluding se	parating

foreground from background.

4 4 4	11				
1.4.1	Use of Color: Color is not used as the only visual means of				7
	conveying information, indicating an action, prompting a response	No			
	or distinguishing a visual element. (Level A)	100			
1.4.2	Audio Control: If any audio on a Web page plays automatically for	1			-
	more than 3 seconds, either a mechanism is available to pause or	Ala			
	stop the audio, or a mechanism is available to control audio volume	()0/			
	independently from the overall system values level (Level A)	10			
1.4.3	independently from the overall system volume level. (Level A)				
1.4.5	Contrast (Minimum): The visual presentation of text and images of				
	text has a contrast ratio of at least 4.5:1, except for the following:	,			
	(Level AA)	V	(/		
	 Large Text: Large-scale text and images of large-scale text 	les	Yac		
	have a contrast ratio of at least 3:1;	103	100		
	Incidental: Text or images of text that are part of an inactive				
	user interface component, that are pure decoration, that are not				
	visible to anyone, or that are part of a richard that are not				
	visible to anyone, or that are part of a picture that contains				
	significant other visual content, have no contrast requirement.				
	Logotypes: Text that is part of a logo or brand name has no				
	minimum contrast requirement.				
1.4.4	Resize text: Except for captions and images of text, text can be	.1	1.)		1
	resized without assistive technology up to 200 percent without loss	Ya.	Yne		
	of content or functionality. (Level AA)	105	Tes		
1.4.5	Images of Text: If the technologies being used can achieve the	1		mages of paren Hessi	-
	visual presentation, text is used to convey information rather than	Yes	110	mages of	
	images of text except for the following: (Level AA)	105	NO	moren these	
	Customizable: The image of text can be visually quotomized to	3	•	- We out	+ alt
	o determination in lage of text call be visually custofflized to			uses war	
	the user's requirements;	Ÿ		xext	
	Essential: A particular presentation of text is essential to the				
	information being conveyed.				
1.4.6	Contrast (Enhanced): The visual presentation of text and images of				
	text has a contrast ratio of at least 7:1, except for the following:				
	(Level AAA)				
	 Large Text: Large-scale text and images of large-scale text 				
	have a contrast ratio of at least 4.5:1;				
	 Incidental: Text or images of text that are part of an inactive 				
	user interface component that are pure description that are				
	user interface component, that are pure decoration, that are not				
	visible to anyone, or that are part of a picture that contains				
	significant other visual content, have no contrast requirement.				
	 Logotypes: Text that is part of a logo or brand name has no 				
	minimum contrast requirement.				
1.4.7	Low or No Background Audio: For prerecorded audio-only content				
	that (1) contains primarily speech in the foreground. (2) is not an				
	audio CAPTCHA or audio logo, and (3) is not vocalization intended	11			
	to be primarily musical expression such as singing or rapping, at				
	least one of the following is true: (Level AAA)				
	No Background: The audio does not contain background				
	sounds.				
	Tarrie baokground sounds can be turned on.				
	20 dB: The background sounds are at least 20 decibels lower				
	than the foreground speech content, with the exception of occasional sounds that last for only one or two seconds.				

Г		
	1.4.8	Visual Presentation: For the visual presentation of blocks of text, a mechanism is available to achieve the following: (Level AAA) • Foreground and background colors can be selected by the user. • Width is no more than 80 characters or glyphs (40 if CJK).
		 Text is not justified (aligned to both the left and the right margins). Line spacing (leading) is at least space-and-a-half within paragraphs, and paragraph spacing is at least 1.5 times larger than the line spacing.
		Text can be resized without assistive technology up to 200 percent in a way that does not require the user to scroll horizontally to read a line of text on a full-screen window.
	1.4.9	Images of Text (No Exception): Images of text are only used for pure decoration or where a particular presentation of text is
		essential to the information being conveyed. (Level AAA)

Principle 2: Operable - User interface components and navigation must be operable.

Stand	ard Description	Amala	Apply Mosts Comm		
		Yes/No	Meets Yes/No	Comments	
Guide	ine 2.1 Keyboard Accessible: Make all functionality available	from a kevbo	ard.		
2.1.1	Keyboard: All functionality of the content is operable through a keyboard interface without requiring specific timings for individu keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. (Level A)	ial Yes	Yes		
2.1.2	No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)	in Yes	Yes		
2.1.3	Keyboard (No Exception): All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes. (Level AAA)				

Imming Adjustable: For each time limit that is set by the content, at least one of the following is true: (Level A)	Guide	line 2.2 Enough Time: Provide users enough time to read and us	e content.		
information, all of the following are true: (Level A) • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. 2.2.3 No Timing: Timing is not an essential part of the event or activity presented by the content, except for non-interactive synchronized media and real-time events. (Level AAA) 2.2.4 Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) 2.2.5 Interruption: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures. Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A) 2.3.2 Three Flashes: Web pages do not contain anything that flashes more than three times in any one second period, clevel AAA) Bypass Blocks: A mechanism is available to bypass blocks of		 Turn off: The user is allowed to turn off the time limit before encountering it; or Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or Essential Exception: The time limit is essential and extending it would invalidate the activity; or 20 Hour Exception: The time limit is longer than 20 hours. 	J les	Kes	
2.2.3 No Timing: Timing is not an essential part of the event or activity presented by the content, except for non-interactive synchronized media and real-time events. (Level AAA) 2.2.4 Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) 2.2.5 Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures. 2.3.1 Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A) 2.3.2 Three Flashes: Web pages do not contain anything that flashes more than three times in any one second period. (Level AAA) Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. 2.4.1 Bypass Blocks: A mechanism is available to bypass blocks of	2.2.2	 information, all of the following are true: (Level A) Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the 	No		
2.2.4 Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) 2.2.5 Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures. 2.3.1 Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A) 2.3.2 Three Flashes: Web pages do not contain anything that flashes more than three times in any one second period. (Level AAA) Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. 2.4.1 Bypass Blocks: A mechanism is available to bypass blocks of	2.2.3	No Timing: Timing is not an essential part of the event or activity presented by the content, except for non-interactive synchronized media and real-time events. (Level AAA)			
Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA) Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures. Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A) Three Flashes: Web pages do not contain anything that flashes more than three times in any one second period. (Level AAA) Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. Bypass Blocks: A mechanism is available to bypass blocks of	2.2.4	Interruptions: Interruptions can be postponed or suppressed by the user, except interruptions involving an emergency. (Level AAA)			
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Three Flashes: Web pages do not contain anything that flashes more than three times in any one second period. (Level AAA) Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. Bypass Blocks: A mechanism is available to bypass blocks of	Guideli 2.3.1	ne 2.3 Seizures: Do not design content in a way that is known to Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash	NO	ures.	
Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are. 2.4.1 Bypass Blocks: A mechanism is available to bypass blocks of	2.3.2	Three Flashes: Web pages do not contain anything that flashes			
CONTROL THAT ARE TEDESTED ON MUITINE WAS PAGE (LAVALA)	Guidelii 2.4.1	ne 2.4 Navigable: Provide ways to help users navigate, find cont	ent, and de	etermine w	here they are.

2.4.2	Page Titled: Web pages have titles that describe topic or purpose.	N.	11	
	(Level A)	195	805	
2.4.3	Focus Order: If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)	NO		
2.4.4	Link Purpose (In Context): The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. (Level A)	445	Yes	
2.4.5	Multiple Ways: More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. (Level AA)	No		
2.4.6	Headings and Labels: Headings and labels describe topic or purpose. (Level AA)	Ves	4.05	
2.4.7	Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)	Yes	Yes	
2.4.8	Location: Information about the user's location within a set of Web pages is available. (Level AAA)			
2.4.9	Link Purpose (Link Only): 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)			
2.4.10	Section Headings: Section headings are used to organize the content. (Level AAA)			

Principle 3: Understandable - Information and the operation of user interface must be understandable.

Stand	ard Description	Apply Yes/No	Meets Yes/No	Comments
Guide	ine 3.1 Readable: Make text content readable and understand	lable.		
3.1.1	Language of Page: The default human language of each Web page can be programmatically determined. (Level A)	125	105	
3.1.2	Language of Parts: The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. (Level AA)		405	
3.1.3	Unusual Words: A mechanism is available for identifying specific definitions of words or phrases used in an unusual or restricted way, including idioms and jargon. (Level AAA)	1/6		
3.1.4	Abbreviations: A mechanism for identifying the expanded form or meaning of abbreviations is available. (Level AAA)			

3.1.5	Reading Level: When text requires reading ability more advanced			
	than the lower secondary education level after removal of proper			
	names and titles, supplemental content, or a version that does not			
	require reading ability more advanced than the lower secondary			
	education level, is available. (Level AAA)			
3.1.6	Pronunciation: A mechanism is available for identifying specific			
	pronunciation of words where meaning of the words, in context, is			
	ambiguous without knowing the pronunciation. (Level AAA)			
Guide	line 3.2 Predictable: Make Web pages appear and operate in pr	edictable	Wavs	
3.2.1	On Focus: When any component receives focus, it does not initiate	I I	1)	
	a change of context. (Level A)	Tes	145	
3.2.2	On Input: Changing the setting of any user interface component	100	1.1	
	does not automatically cause a change of context unless the user	145	Vac	
	has been advised of the behavior before using the component.	183	145	
	(Level A)			
3.2.3	Consistent Navigation: Navigational mechanisms that are repeated			
	on multiple Web pages within a set of Web pages occur in the	0 7	11	
	same relative order each time they are repeated, unless a change	145	125	
	is initiated by the user. (Level AA)	103		
3.2.4	Consistent Identification: Components that have the same	.)	11	
	functionality within a set of Web pages are identified consistently.	lus	105	
	(Level AA)	125	105	
3.2.5	Change on Request: Changes of context are initiated only by user			
	request or a mechanism is available to turn off such changes.			
	(Level AAA)			1997
Guidel	ine 3.3 Input Assistance: Help users avoid and correct mistakes.			
3.3.1	Error Identification: If an input error is automatically detected, the			
	item that is in error is identified and the error is described to the	145	105	
	user in text. (Level A)	143	100	
3.3.2	Labels or Instructions: Labels or instructions are provided when	105	Ye5	
3.3.3	content requires user input. (Level A)	103	163	
3.3.3	Error Suggestion: If an input error is automatically detected and suggestions for correction are known, then the suggestions are			
	provided to the user, unless it would jeopardize the security or	No		
	purpose of the content. (Level AA)	,		
3.3.4	Error Prevention (Legal, Financial, Data): For Web pages that			
	cause legal commitments or financial transactions for the user to			T 80
	occur, that modify or delete user-controllable data in data storage			2 100
	systems, or that submit user test responses, at least one of the following is true: (Level AA)	_		NOT SEE
	Reversible: Submissions are reversible.	NO		a least
	Checked: Data entered by the user is checked for input errors	V		I go not see a leage! of Financial committeen
	and the user is provided an opportunity to correct them.			Dr. Pyran
	 Confirmed: A mechanism is available for reviewing. 			cammiter
	confirming, and correcting information before finalizing the			W
2.2.=	submission.			
3.3.5	Help: Context-sensitive help is available. (Level AAA)			

	18 11 11 15 18 18 18 18 18 18 18 18 18 18 18 18 18	
3.3.6	Error Prevention (All): For Web pages that require the user to submit information, at least one of the following is true: (Level AAA) Reversible: Submissions are reversible. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.	

Principle 4: Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

Stand	ard Description	Apply Yes/No	Meets Yes/No	Comments
Guidel techno	ine 4.1 Compatible: Maximize compatibility with current and plogies.	future user o	igents, inc	luding assistive
4.1.1	Parsing: In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A)	Teb S	MO	some issues with missing form text
4.1.2	Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmaticall determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Level A)	100	Yes	

8

Mant Wand
11/29/16

Graphs missing alt text - would give away the answer work around - manipulatores in terpicter

Web Content Accessibility Guidelines 2.0 Checklist

Cengage Brain – companion to Swokowski: "Pre-Calculus, Functions and Graphs", 12th edition.

Principle 1: Perceivable – information and user interface components must be presentable to users in ways they can perceive.

Guideline 1.1 Text Alternatives: Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language. 1.1.1 Non-text Content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A). • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. • Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can	Stand	ard Description	Apply Yes/No	Meets Yes/No	Comments (mandatory)
1.1.1 Non-text Content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A). • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. • Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not	Guide	line 1.1 Text Alternatives: Provide text alternatives for any non-t	ext conten	t so that it	can be
user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A). • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. • Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not	chang	ed into other forms people need, such as large print, braille, spe	ech, symbo	ols or simp	ler language.
		 Non-text Content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A). Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.) Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.) Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can 	1	•	Some graphs are missing alttext. A textual description would provide the answer that is sought (for example, students are asked to identify the location of a coordinate on a given graph). Remediation through suitable manipulatives
be ignored by assistive technology. Guideline 1.2 Time-based Media: Provide alternatives for time-based media.	Guide		nedia.		

1.2.1	Audio-only and Video-only (Prerecorded): For prerecorded audio-	No					
	only and prerecorded video-only media, the following are true,						
	except when the audio or video is a media alternative for text and						
	is clearly labeled as such (Level A):						
	Prerecorded Audio-only: An alternative for time-based media						
	is provided that presents equivalent information for						
	prerecorded audio-only content.						
	Prerecorded Video-only: Either an alternative for time-based						
	media or an audio track is provided that presents equivalent						
	information for prerecorded video-only content.						
1.2.2	Captions (Prerecorded): Captions are provided for all prerecorded	No					
1.2.2	audio content in synchronized media, except when the media is a	INO					
4.2.2	media alternative for text and is clearly labeled as such. (Level A)	NI -					
1.2.3	Audio Description or Media Alternative (Prerecorded): An	No					
	alternative for time-based media or audio description of the						
	prerecorded video content is provided for synchronized media,						
	except when the media is a media alternative for text and is clearly						
	labeled as such. (Level A)						
1.2.4	Captions (Live): Captions are provided for all live audio content in	No					
	synchronized media. (Level AA)						
1.2.5	Audio Description (Prerecorded): Audio description is provided for	No					
	all prerecorded video content in synchronized media. (Level AA)						
1.2.6	Sign Language (Prerecorded): Sign language interpretation is	N/A					
	provided for all prerecorded audio content in synchronized media.	,					
	(Level AAA)						
1.2.7	Extended Audio Description (Prerecorded): Where pauses in	N/A					
1.2.7	foreground audio are insufficient to allow audio descriptions to	11,77					
	convey the sense of the video, extended audio description is						
	provided for all prerecorded video content in synchronized media.						
	(Level AAA)						
1.2.8	Media Alternative (Prerecorded): An alternative for time-based	N/A					
1.2.0		IN/A					
	media is provided for all prerecorded synchronized media and for						
1.0.0	all prerecorded video-only media. (Level AAA)						
1.2.9	Audio-only (Live): An alternative for time-based media that	N/A					
	presents equivalent information for live audio-only content is						
	provided. (Level AAA)						
Guidel	line 1.3 Adaptable: Create content that can be presented in diffe	rent ways	(for exam _l	ole simpler			
layout) without losing information or structure.						
1.3.1	Info and Relationships: Information, structure, and relationships	Yes	Yes				
	conveyed through presentation can be programmatically						
	determined or are available in text. (Level A)						
1.3.2	Meaningful Sequence: When the sequence in which content is	Yes	Yes				
	presented affects its meaning, a correct reading sequence can be						
1 2 2	programmatically determined. (Level A) Sensory Characteristics: Instructions provided for understanding	No					
1.3.3	and operating content do not rely solely on sensory characteristics	No					
	of components such as shape, size, visual location, orientation, or						
	sound. (Level A)						
Guidel	line 1.4 Distinguishable: Make it easier for users to see and hear	content in	cludina se	paratina			
	Guideline 1.4 Distinguishable: Make it easier for users to see and near content including separating						

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

1.4.1	Use of Color: Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)	No		
1.4.2	Audio Control: If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)	No		
1.4.3	 Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: (Level AA) Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1; Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement. Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement. 	Yes	Yes	
1.4.4	Resize text: Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. (Level AA)	Yes	Yes	
1.4.5	 Images of Text: If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: (Level AA) Customizable: The image of text can be visually customized to the user's requirements; Essential: A particular presentation of text is essential to the information being conveyed. 	Yes	No	In some instances, images of text are used, such as parenthesis in around answer boxes where an ordered pair is requested. This does not appear to alter functionality, since answers with a superfluous pair of parenthesis are accepted.
1.4.6	 Contrast (Enhanced): The visual presentation of text and images of text has a contrast ratio of at least 7:1, except for the following: (Level AAA) Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 4.5:1; Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement. Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement. 	N/A		

1.4.7	 Low or No Background Audio: For prerecorded audio-only content that (1) contains primarily speech in the foreground, (2) is not an audio CAPTCHA or audio logo, and (3) is not vocalization intended to be primarily musical expression such as singing or rapping, at least one of the following is true: (Level AAA) No Background: The audio does not contain background sounds. Turn Off: The background sounds can be turned off. 20 dB: The background sounds are at least 20 decibels lower than the foreground speech content, with the exception of occasional sounds that last for only one or two seconds. 	N/A	
1.4.8	 Visual Presentation: For the visual presentation of blocks of text, a mechanism is available to achieve the following: (Level AAA) Foreground and background colors can be selected by the user. Width is no more than 80 characters or glyphs (40 if CJK). Text is not justified (aligned to both the left and the right margins). Line spacing (leading) is at least space-and-a-half within paragraphs, and paragraph spacing is at least 1.5 times larger than the line spacing. Text can be resized without assistive technology up to 200 percent in a way that does not require the user to scroll horizontally to read a line of text on a full-screen window. 	N/A	
1.4.9	Images of Text (No Exception): Images of text are only used for pure decoration or where a particular presentation of text is essential to the information being conveyed. (Level AAA)	N/A	

Principle 2: Operable - User interface components and navigation must be operable.

Stand	ard Description	Apply	Meets	Comments
		Yes/No	Yes/No	
Guidel	ine 2.1 Keyboard Accessible: Make all functionality available fro	m a keybo	ard.	
2.1.1	Keyboard: All functionality of the content is operable through a	Yes	Yes	
	keyboard interface without requiring specific timings for individual			
	keystrokes, except where the underlying function requires input			
	that depends on the path of the user's movement and not just the			
	endpoints. (Level A)			
2.1.2	No Keyboard Trap: If keyboard focus can be moved to a	Yes	Yes	
	component of the page using a keyboard interface, then focus can			
	be moved away from that component using only a keyboard			
	interface, and, if it requires more than unmodified arrow or tab			
	keys or other standard exit methods, the user is advised of the			
	method for moving focus away. (Level A)			
2.1.3	Keyboard (No Exception): All functionality of the content is			
	operable through a keyboard interface without requiring specific			
	timings for individual keystrokes. (Level AAA)			

Guideline 2.2 Enough Time: Provide users enough time to read and use content.						
2.2.1	Timing Adjustable: For each time limit that is set by the content, at	Yes	Yes			
	least one of the following is true: (Level A)					
	Turn off: The user is allowed to turn off the time limit before					
	encountering it; or					
	Adjust: The user is allowed to adjust the time limit before					
	encountering it over a wide range that is at least ten times the					
	length of the default setting; or					
	Extend: The user is warned before time expires and given at					
	least 20 seconds to extend the time limit with a simple action					
	(for example, "press the space bar"), and the user is allowed to					
	extend the time limit at least ten times; or					
	· · · ·					
	time event (for example, an auction), and no alternative to the					
	time limit is possible; or					
	Essential Exception: The time limit is essential and extending it					
	would invalidate the activity; or					
	20 Hour Exception: The time limit is longer than 20 hours.					
2.2.2	Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating	No				
	information, all of the following are true: (Level A)					
	Moving, blinking, scrolling: For any moving, blinking or					
	scrolling information that (1) starts automatically, (2) lasts					
	more than five seconds, and (3) is presented in parallel with					
	other content, there is a mechanism for the user to pause,					
	stop, or hide it unless the movement, blinking, or scrolling is					
	part of an activity where it is essential; and					
	Auto-updating: For any auto-updating information that (1)					
	starts automatically and (2) is presented in parallel with other					
	content, there is a mechanism for the user to pause, stop, or					
	hide it or to control the frequency of the update unless the					
	auto-updating is part of an activity where it is essential.					
2.2.3	No Timing: Timing is not an essential part of the event or activity	N/A				
	presented by the content, except for non-interactive synchronized					
	media and real-time events. (Level AAA)					
2.2.4	Interruptions: Interruptions can be postponed or suppressed by	N/A				
	the user, except interruptions involving an emergency. (Level AAA)					
2.2.5	Interruptions: Interruptions can be postponed or suppressed by	N/A				
	the user, except interruptions involving an emergency. (Level AAA)					
Guidel	Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures.					
2.3.1	Three Flashes or Below Threshold: Web pages do not contain	No				
	anything that flashes more than three times in any one second					
	period, or the flash is below the general flash and red flash					
2.3.2	thresholds. (Level A) Three Flashes: Web pages do not contain anything that flashes	N/A				
2.3.2	more than three times in any one second period. (Level AAA)	N/A				
Guidel	line 2.4 Navigable: Provide ways to help users navigate, find cont	tent, and o	letermine	where they are.		
2.4.1	Bypass Blocks: A mechanism is available to bypass blocks of	No		2.2 2.20		
	content that are repeated on multiple Web pages. (Level A)					
	Toontent that are repeated on multiple web pages. (Level A)					

2.4.2	Page Titled: Web pages have titles that describe topic or purpose. (Level A)	Yes	Yes	
2.4.3	Focus Order: If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)	No		
2.4.4	Link Purpose (In Context): The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. (Level A)	Yes	Yes	
2.4.5	Multiple Ways: More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. (Level AA)	No		
2.4.6	Headings and Labels: Headings and labels describe topic or purpose. (Level AA)	Yes	Yes	
2.4.7	Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)	Yes	Yes	
2.4.8	Location: Information about the user's location within a set of Web pages is available. (Level AAA)	N/A		
2.4.9	Link Purpose (Link Only): 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)	N/A		
2.4.10	Section Headings: Section headings are used to organize the content. (Level AAA)	N/A		

Principle 3: Understandable - Information and the operation of user interface must be understandable.

Stand	ard Description	Apply Yes/No	Meets Yes/No	Comments	
Guidel	ine 3.1 Readable: Make text content readable and understandab	ole.			
3.1.1	Language of Page: The default human language of each Web page Yes Yes can be programmatically determined. (Level A)				
3.1.2	Language of Parts: The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. (Level AA)				
3.1.3	Unusual Words: A mechanism is available for identifying specific definitions of words or phrases used in an unusual or restricted way, including idioms and jargon. (Level AAA)	N/A			
3.1.4	Abbreviations: A mechanism for identifying the expanded form or meaning of abbreviations is available. (Level AAA)	N/A			

3.1.5	Reading Level: When text requires reading ability more advanced than the lower secondary education level after removal of proper names and titles, supplemental content, or a version that does not require reading ability more advanced than the lower secondary education level, is available. (Level AAA) Pronunciation: A mechanism is available for identifying specific	N/A				
0.2.0	pronunciation of words where meaning of the words, in context, is ambiguous without knowing the pronunciation. (Level AAA)	ciation of words where meaning of the words, in context, is				
Guidel	ine 3.2 Predictable: Make Web pages appear and operate in pre	dictable w	ays.			
3.2.1	On Focus: When any component receives focus, it does not initiate a change of context. (Level A)	Yes	Yes			
3.2.2	On Input: Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component. (Level A)	Yes	Yes			
3.2.3	Consistent Navigation: Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. (Level AA)	Yes	Yes			
3.2.4	Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)	Yes	Yes			
3.2.5						
Guidel	ine 3.3 Input Assistance: Help users avoid and correct mistakes.					
3.3.1			Yes			
3.3.2	Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A)	Yes	Yes			
3.3.3	Error Suggestion: If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. (Level AA)	No				

3.3.4	 Error Prevention (Legal, Financial, Data): For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true: (Level AA) Reversible: Submissions are reversible. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. 	Yes	Unclear	At first signup, students need to enter a Credit Card number or other access code. This screen cannot be reached without actually having a valid code or valid credit card number. At the risk of being charge, this was not being tested, but we assume that the publisher acts in good faith and meets this requirement.
3.3.5	Help: Context-sensitive help is available. (Level AAA)	N/A		
3.3.6	 Error Prevention (All): For Web pages that require the user to submit information, at least one of the following is true: (Level AAA) Reversible: Submissions are reversible. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. 	N/A		

Principle 4: Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

Standard	Description	Apply Yes/No	Meets Yes/No	Comments		
	Guideline 4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies.					

4.1.1	Parsing: In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A)	Yes	No	Some coding issues were identified when tables are used to display algorithmically generated problems. These appear to be minor.
4.1.2	Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Level A)	Yes	Yes	

Accessibility Review Form

Section 1: General Information

Campus Tracking Number

*It is recommended that the campus have a tracking number for their reviews. This number allows for the reviewer to find previous purchases and to tie this document to the AIMT Checklist for this adoption/procurement.

Product/Service

Use the information from the Adoption/Procurement Checklist document to complete this section.

Product Name	
Version Number	Webassign Platform for Swokowski Precalculus: Functions & Graphs
Vendor Name	Cengage Learning

Type of IMT

Type of Acquisition	Check	Comment
New aquisition	Χ	
Repeat acquisition without changes, previously approved AIMT		
Repeat acquisition with changes, review needed		
Other (explain)		

Section 2: Review Information

Accessibility Documentation

Document Recieved	Check	Comment
Accessibility Statement		Requested from publisher. Not received.
Conformance and	Х	
Remediation Form		
508 VPAT/Other Forms		Requested from publisher. Conformance form refers to website.
		Webassign is not listed among the items for which a VPAT is available.

Review Steps

Step	Check	Comments
Review Documentation	Χ	
Accessibility testing if needed	Χ	Performed on 11/29/16 with Bruce Botts, Susan Sutton and Matthew Ward.
Develop AAP if needed	Χ	

Section 3: Correspondence

Document correspondence with vendor			
Document correspondence with purchase requester			

Section 4: Summary and Recommendations

Review Checklist

Step	Check	Comments
Accessibility Review Complete	Х	
Accessibility Testing Complete	Х	
C and R Form Complete	Х	Provided by Publisher
AAP Complete	Х	

Findings

Platform is largely accessible, but some accommodations will need to be made for certain problem	ns
i nationin is largely accessible, but some accommodations will need to be made for certain problem	13.

Recommendations

Section 5: Signature

Accessibility Liaison/Other Designee	
Signature	
Accessibility Liaison/Other Designee Title	
Date	



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Accessibility

WebAssign is committed to providing powerful educational tools and content for all students, including students with disabilities.

Accessibility for students with visual impairments is particularly an issue with science, technology, engineering, and math (STEM) content, which traditionally uses complex notation and figures. WebAssign provides accessible representations of both notation and figures to screen readers. And, students entering math notation can use the same "calculator" notation that is read by the screen reader without worrying about the visual representation of the math.

Accessible content in WebAssign is tested using the following assistive technology:

- JAWS[®], version 16.0
- Window-Eyes™, version 9.2
- ZoomText[®]Magnifier, version 10.0

Screen readers usually need to be configured differently to read STEM content than for other types of content. WebAssign has worked with the makers of JAWS and Window-Eyes to create a set of recommended settings to make it easier to interpret STEM content. These screen readers are Text-To-Speech (TTS) engines that help read the images and words on the computer screen, including STEM

See a WebAssign Question Interpreted by JAWS



expressions. Expressions include non-equivalent upper- and lowercase letters, mathematical symbols and chemical formulas, including the use of superscripts, and subscripts.

WebAssign can help you select or create accessible content for your class. Please email us at

accessibility@webassign.net with your request.

WebAssign will work with the instructor, the institution's disability office, and the publisher of your preferred textbook to create a course that can be completed with the use of assistive technology, such as the screen readers mentioned above. Please be aware that this may take up to eight weeks. We recommend contacting us well before the start of the course.

WebAssign will also help coordinate with the publisher to provide you with an accessible form of the textbook. Due to copyright and ownership restrictions, publishers remain in control of the distribution of their material.

A recent external audit conducted by consultants from Tech For All found that "in our assessment of assignment questions, non-text content has well-written alternative text. Assignment questions are correctly marked up and easy to complete for visually impaired users." However, we still have work to do to improve our navigability. We are planning on making incremental changes throughout the upcoming academic year to improve the user experience. Our ultimate goal is to support WCAG 2.0 level AA standards across the entire student experience.



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VOLUNTARY PRODUCT ACCESSIBILITY TEMPLATE

WHAT IS A VPAT?

The purpose of the Voluntary Product Accessibility Template, or VPAT, is to assist Federal contracting officials and other buyers in making preliminary assessments regarding the availability of commercial "Electronic and Information Technology" products and services with features that support accessibility. It is assumed and recommended that offerers will provide contact information to facilitate more detailed inquiries. The first table in the Summary provides this information.

The second table provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Applicable Standards Table describes the subsections of subparts B and C of the Standards. The second column identifies the supported features of the product. The third column refers to the corresponding detailed table.

In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

VPAT SUMMARY

TABLE 1 - PRODUCT SUMMARY

Name of Company	Advanced Instructional Systems, Inc.
Name of Product	WebAssign
Scope of Statement	Applies to specially curated accessible content using
	recommended accessibility settings.
Issuance Date	August 15, 2013 - updated: April 28, 2014
Contact for More Information	Accessibility Coordinator
	accessibility@webassign.net
	(800) 955-8275

Table 2 – Applicable Section 508 Standards

Guideline	Applicability	Compliance
§ 1194.21: Software Applications and Operating Systems	Not Applicable	
§ 1194.22: Web-based Internet Information and Applications	Applicable	See Table 3
§ 1194.23: Telecommunications Products	Not Applicable	
§ 1194.24: Video and Multi-Media Products	Not Applicable	
§ 1194.25: Self-Contained, Closed Products	Not Applicable	
§ 1194.26: Desktop and Portable Computers	Not Applicable	
§ 1194.31: Functional Performance Criteria	Applicable	See Table 4
§ 1194.41: Information, Documentation and Support	Applicable	See Table 5

VPAT DETAILS

TABLE 3 - § 1194.22: WEB-BASED INTERNET INFORMATION AND APPLICATIONS

Criteria	Supporting Features	Remarks and Explanations
(a) A text equivalent for every non- text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supports with Exceptions.	Text alternatives are provided for most images, including 100% of those in assignment content.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Supports with Exceptions.	Availability of Closed Captioning and Transcripts for videos vary by title and/or publisher. Contact us for more information.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supports.	Color is not used as the sole means of communicating information within the WebAssign application.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not Applicable – Fundamental Alteration Exception Applies.	Style sheets are required for most screens. It should be noted that users of Compatible Assistive Technology would have full access to such style sheets.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not Applicable.	There are no server-side image maps used in this content.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not Applicable.	There are no server-side image maps used in this content.
(g) Row and column headers shall be identified for data tables.	Supports with Exceptions.	There are some layout elements that appear as data tables but are not coded as data tables. Most data tables are provided with title, header, and row information insofar as they do not provide users of assistive technology with an advantage over other users.

TABLE 3 - § 1194.22: WEB-BASED INTERNET INFORMATION AND APPLICATIONS

Criteria	Supporting	Remarks and Explanations
	Features	
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supports.	Complex data tables are provided with summary, title, header, and row information insofar as they do not provide users of assistive technology with an advantage over other users.
(i) Frames shall be titled with text that facilitates frame identification and navigation.	Supports.	Frames are titled correctly.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supports.	Pages do not contain flashing elements.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not Applicable – Fundamental Alteration Exception Applies.	No accessible text pages are provided. It is not practical to supply text-only pages with equivalent functionality across the spectrum of delivered content.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by assistive technology.	Supports with Exceptions.	There are some interactive elements (drop-down menu, expand/collapse control, etc.) that do not support keyboard events. These elements are not critical to the primary user experience, but may appear in optional features.
(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).	Supports.	Requirements are generally communicated before the page containing the required applet or plug-in is presented. Instructions may vary by instructor where they deviate from recommended settings.

TABLE 3 - § 1194.22: WEB-BASED INTERNET INFORMATION AND APPLICATIONS

Criteria	Supporting Features	Remarks and Explanations
(n) When electronic forms are designed to be completed on-line, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports when Combined with Compatible Assistive Technology.	Most form elements are properly labeled. The choice of Assistive Technology and its configuration can have a profound impact on the ability to meet this criterion. See: § 1194.41(b) for details.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not Applicable.	There are no repetitive navigation links on the pages.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Supports.	Timed responses and their duration are at the discretion of the instructor designing the course content.

TABLE 4 - § 1194.31: FUNCTIONAL PERFORMANCE CRITERIA

Criteria	Supporting Features	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.	Supports when Combined with Compatible Assistive Technology.	Most content can be accessed with screen readers.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for assistive technology used by people who are visually impaired shall be provided.	Supports when Combined with Compatible Assistive Technology.	Scaling is compliant per functionality of the end-user's browser. Use of low contrast text styles may cause poor visibility of some text elements.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for assistive technology used by people who are deaf or hard of hearing shall be provided.	Supports with Exceptions.	Availability of Closed Captioning and Transcripts for videos vary by title and/or publisher. Contact us for more information.
(d) Where audio information is important for use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced fashion, or support for assistive hearing devices shall be provided.	Supports with Exceptions.	Availability of Closed Captioning and Transcripts for videos vary by title and/or publisher. Contact us for more information.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive technology used by people with disabilities shall be provided.	Not Applicable.	Speech is not required to operate this website.

Table 4 – § 1194.31: Functional Performance Criteria

Criteria	Supporting Features	Remarks and Explanations
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supports.	Accessibility features built into the operating system, such as Windows Sticky Keys and Mouse Keys, allow users to actuate multiple, simultaneous key presses.

Table 5 – § 1194.41: Information, Documentation and Support

Criteria	Supporting Features	Remarks and Explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supports.	Support documentation is available as online HTML Help or as a downloadable PDF.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports.	Accessibility features are posted to the main website. Best-practices information is available from the User's Guide/Online Help documentation.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports.	Support is provided by web, phone, or e-mail.