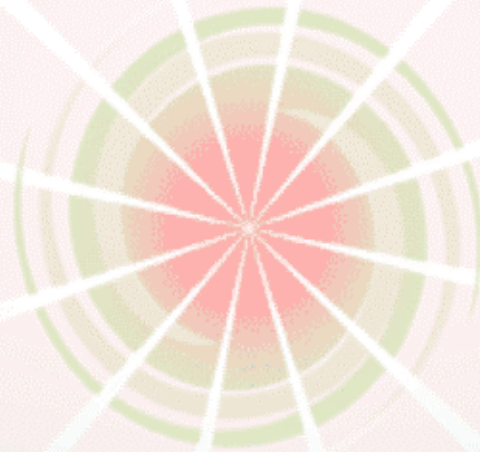


# Section 508 Awareness

## Web Accessibility

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# Objectives

- State the basic requirements of the law.
- Identify the various disabilities students might have and how those disabilities affect students' online learning experience.
- Use an online service to test a Web page for accessibility.
- Create accessible learning activities for online information that is problematic.

# Introduction

- Statistics: US Census Bureau
- Web use in the US
- Accessibility initiatives

# Legislation

- Americans with Disabilities Act
- Rehabilitation Act
  - Section 504
  - Section 508

# Exceptions

- National security systems
- Public Web pages of a vendor
- Products used that are incidental to a contract
- Systems used for routine administrative and business applications
- Undue burden

# Undue Burden

- When compliance with the provisions of these standards imposes an undue burden, agencies shall provide individuals with disabilities with the information and data involved by an alternative means of access that allows the individual to use the information and data.
- Undue burden means significant difficulty or expense; analogous to the term "undue hardship" in Title I of the ADA.

# Legal Issues

- ADA case law has established that Web sites are places of public access
- Colleges and universities are subject to the ADA and Section 504
- DOJ, DOE, and OCR are using Section 508 to judge equal access and effective communication
- Reauthorization of Rehabilitation Act may make 508 mandatory for 504 subject entities

# Using the Web

- Types of disabilities:
  - Visual
  - Aural
  - Motor
  - Cognitive
  - Emotional/Neurological
- Accommodating disabilities



# Exercises

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- Keyboard navigation
- WebAIM simulations
- JAWS demo

**Break**



# **Different ways of making PowerPoint accessible**



# Use PowerPoint presentation

- Use PowerPoint presentation and HTML-based version for accessibility
- Drawback: Huge file size
- Benefit: Printer friendly

# Drawbacks of Traditional PowerPoint presentation

- Not accessible. Not read by the reader.
- If the student does not have PowerPoint plug-in or PowerPoint installed on their computer , they can't access them.

# Save as Webpage

- Save as ppt web page and HTML-based version for accessibility

## **Drawbacks:**

- Not fully accessible as Images are not read by the reader.
- The contents read by the reader are very confusing. Why?
  - Frames. Reader reads left frame before reading right frame.
- First read the content and then textboxes
- Not printer friendly. One slide at a time

## **Benefit:**

- Small file size

# Flash Slides

- Use Flash to create slides show for presentation and HTML-based version for accessibility

## **Drawbacks:**

- Not printer friendly
- Time consuming

## **Benefits:**

- Small file size
- Not cluttered information like saving as web page

# PowerPoint ADD-ON

- The University of Illinois has created an add-on to PowerPoint that does a good job of converting PowerPoint slides into an accessible HTML format, but requires lot of clean up in the HTML file.

<http://www.webaim.org/techniques/powerpoint/>



# Conclusion

- PowerPoint is a good tool for classroom teaching not online teaching.
- For online teaching there isn't a single method which produces satisfactory results.
- Lot of cleaning needs to be done to make them accessible to the students.
- Discourage using PowerPoint presentations in online teaching.

# PDF Accessibility



Yes – No – Maybe?

# PDF is Accessible

- Using Acrobat 6.0

# Flash Accessibility

Yes – No – Maybe?



# Flash is Accessible

- Flash Demo
  1. Flash writes HTML for accessibility.
  2. Keyboard Access.

# What is Required?

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- Separate Text File
- Keyboard Access

# Structure Vs. Presentation

- An *element* (e.g., P, STRONG, BLOCKQUOTE in HTML) that specifies document structure is called a structural element.
- An *element* that specifies document presentation (e.g., B, FONT, CENTER) is called a presentation element.
  - The presentation of a document is how the document is rendered (e.g., as print, as a two-dimensional graphical presentation, as a text-only presentation, as synthesized speech, as Braille, etc.)

# Structure

Within the document body, structural markup includes such things as:

- Headers
- Paragraphs and breaks
- Lists, Blockquote
- Tables (especially when used as intended: for tabular data)
- Strong
- em



# Presentation

- Alignment values (right, left, center, justify)
- Color values
- Fonts,size(pt)
- Borders
- Table Linearization

# Why is it Important?

- For the person with a disability.
- Content in a user friendly method.
- Future adaptation to new technology.
- We want the user to have an experience that is as clear as possible.

# Other Online Issues

- Clear and simple language
- Intuitive Navigation
- Meaningful (contextual) hyperlinks
- Explicit email links (using addresses vs. description)
- Good visual contrast

# Resources

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- [Template Demo](#)
- [Developer's Guide](#)

# Validation

- Checklists
- Online Web page validation tools
  - Choices
  - Usefulness
  - Limitations

# Bobby

- Free service from WatchFire
- Tests against WCAG –or- Section 508
- Limited to 1 page per minute
- Pages must be on public Internet
- Desktop version is available



## Grading Policy:

| ASSIGNMENT                          | POINTS     |
|-------------------------------------|------------|
| Homework exercises (10 points each) | 50         |
| Mid-term                            | 50         |
| Lab Assignments (10 points each)    | 50         |
| Final Exam                          | 100        |
| Participation                       | 25         |
| Database project                    | 100        |
| <b>Total Points</b>                 | <b>375</b> |



## Sinclair Academic Policies:

Click the link below to view policies such as important college dates, dropping a course, withdrawing from college, late registrations, change of schedule, administrative withdrawal, grades, student behavior guidelines, safety and security, academic and other counseling.

Understanding these policies is the responsibility of every student.

[View important Sinclair policies in a new browser window](#)

## Honor Code:

The [Sinclair Community College Honor Code](#) sets forth the ethical values and practices expected of all Sinclair faculty, staff, and students. Please take a few moments to review and understand this information.

## Sinclair Proctor Policy:

If you live beyond a 60 mile radius of Sinclair, then you may arrange proctored exams at a site near your home. You are responsible for securing a proctor by the end of the first week of the

Course Syllabus - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print Copy Paste

Address [%2F%2Fpeople.sinclair.edu%2Fflorencesharp%2Fspringconf%2Fgeneral%2Fsyllabus\\_demo.htm&output=Submit&gl=sec508&test=#g9](#) Go Links SnagIt

[alt Bobby Report](#)

Follow the links in guideline titles for detailed information about the error.

## Section 508 Accessibility

This page does not meet the requirements for Section 508 Approved status. Below is a list of **1** Section 508 accessibility error(s) found:

- [Provide alternative text for all images.](#) (2 instances)  
**Lines 175, 280**

## Section 508 User Checks

User checks are triggered by something specific on the page; however, you need to determine manually whether they apply and, if applicable, whether your page meets the requirements. Bobby Section 508 Approval requires that all user checks pass. Even if your page does conform to these guidelines they appear in the report. Please review these **6** item(s):

- [If you can't make a page accessible, construct an alternate accessible version.](#)
- [If style sheets are ignored or unsupported, are pages still readable and usable?](#)
- [If this is a data table \(not used for layout only\), identify headers for the table rows and columns.](#) (5 instances)  
**Lines 12, 24, 56, 98, 324**
- [If you use color to convey information, make sure the information is also represented another way.](#) (6 instances)  
**Lines 26, 58, 100, 175, 280, 326**
- [If an image conveys important information beyond what is in its alternative text, provide an extended description.](#) (6 instances)  
**Lines 26, 58, 100, 175, 280, 326**
- [If a table has two or more rows or columns that serve as headers, use structural markup to identify their hierarchy and relationship.](#) (8 instances)  
**Lines 12, 24, 56, 98, 173, 278, 324, 10**

The following **1** item(s) are not triggered by any specific feature on your page, but are still important for accessibility and are required for Bobby Section 508 Approved status.

- [If a timed process is about to expire, give the user notification and a chance to extend the timeout.](#)


Internet



# WAVE

- Free tool from WebAIM
- Tests 3 levels of WCAG, Section 508, or both
- Lets you set preferences
- Tests pages on the Internet, uploaded from your computer, or on-the-fly if you install a browser tool

**Grading Policy:**

|  <b>th</b> *id="header1"* | <b>ASSIGNMENT</b>                   | <b>th</b> *id="header2"* | <b>POINTS</b> |
|--|-------------------------------------|--------------------------|---------------|
| *headers= "header1"*   | Homework exercises (10 points each) | *headers= "header2"*     | 50            |
| *headers= "header1"*   | Mid-term                            | *headers= "header2"*     | 50            |
| *headers= "header1"*   | Lab Assignments (10 points each)    | *headers= "header2"*     | 50            |
| *headers= "header1"*   | Final Exam                          | *headers= "header2"*     | 100           |
| *headers= "header1"*   | Participation                       | *headers= "header2"*     | 25            |
| *headers= "header1"*   | Database project                    | *headers= "header2"*     | 100           |
| *headers= "header1"*   | <b>Total Points</b>                 | *headers= "header2"*     | <b>375</b>    |



\*Other

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Click the link below to view policies such as important college dates, dropping a course, withdrawing from college, late registrations, change of schedule, administrative withdrawal, grades, student behavior guidelines, safety and security, academic and other counseling.

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to me. [Procedures for securing a proctor and the proctor form](#)  **\*Is it in tagged PDF format or is an HTML alternative provided?\*** may be downloaded from Sinclair's Distance Learning web site.

Questions about proctoring should be addressed to the Coordinator of Distance Learning

# Cynthia Says

- Free from HiSoftware
- Tests 3 levels of WCAG or Section 508
- Tests about 1 page per minute
- Pages must be on the public Internet
- Desktop version is available

## Cynthia™ Says - Web Content Accessibility Report

Powered by [HiSoftware Content Quality Technology](#)

If you like this we think you will like [HiSoftware Web Site Link Validation Utility only \\$29.99!...](#)



**Verified File Name:** [http://people.sindair.edu/florencesharp/springconf/general/syllabus\\_demo.htm](http://people.sindair.edu/florencesharp/springconf/general/syllabus_demo.htm)

**Date and Time:** 3/23/2004 4:02:38 PM

**Failed Automated Verification**

**Emulated Browser:** MS Internet Explorer 5.0

The level of detail setting for the report is to show all detail.

### Verification Checklist

| Checkpoints  | Passed |    |       |
|--|--------|----|-------|
|  | Yes    | No | Other |
| <b>508 Standards, Section 1194.22</b>  |        |    |       |
| <b>A. 508 Standards, Section 1194.22, (a)</b> A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).   |        | No |       |
| <ul style="list-style-type: none"> <li>○ Rule: 1.1.1 - All IMG elements are required to contain either the alt or the longdesc attribute.                             <ul style="list-style-type: none"> <li>○ <b>Failure</b> - IMG Element at Line: 175, Column: 65</li> <li>○ <b>Failure</b> - IMG Element at Line: 280, Column: 65</li> </ul> </li> <li>○ Rule: 1.1.2 - All INPUT elements are required to contain the alt attribute or use a LABEL.                             <ul style="list-style-type: none"> <li>○ No INPUT Elements found within document</li> </ul> </li> <li>○ Rule: 1.1.3 - All OBJECT elements are required to contain element content.                             <ul style="list-style-type: none"> <li>○ No OBJECT elements found in document body.</li> </ul> </li> <li>○ Rule: 1.1.4 - All APPLET elements are required to contain both element content and the alt attribute.                             <ul style="list-style-type: none"> <li>○ No APPLET elements found in document body.</li> </ul> </li> <li>○ Rule: 1.1.6 - All IFRAME elements are required to contain element content.                             <ul style="list-style-type: none"> <li>○ No IFRAME elements found in document body.</li> </ul> </li> <li>○ Rule: 1.1.7 - All Anchor elements found within MAP elements are required to contain the alt attribute.                             <ul style="list-style-type: none"> <li>○ No MAP elements found in document body.</li> </ul> </li> <li>○ Rule: 1.1.8 - All AREA elements are required to contain the alt attribute.                             <ul style="list-style-type: none"> <li>○ No AREA elements found in document body.</li> </ul> </li> <li>○ Rule: 1.1.9 - When EMBED Elements are used, the NOEMBED element is required in the document.                             <ul style="list-style-type: none"> <li>○ No EMBED elements found in document body.</li> </ul> </li> </ul> |        |    |       |
| <b>B. 508 Standards, Section 1194.22, (h)</b> Equivalent alternatives for any multimedia presentation shall be synchronized with the   |        |    | N/A   |

# Support

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- Web resources
- WCDT
- Disability Services