Creating Accessible Documents and Providing Accessible Online Content

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ICSPS

impacting educational equity

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The Illinois Center for Specialized Professional Support (ICSPS) creates, supports, and delivers professional development for career and technical education professionals across Illinois. ICSPS provides technical assistance, develops publications, and facilitates program improvement strategies for our partners as they relate to college transition, recruitment, retention, and completion–encouraging achievement of special populations learners.

Our work with special populations has given us opportunities to work on a number of issues related to supporting students with disabilities in Illinois. We also have extensive work experience related to civil rights compliance. The intersection of these two subject area in the topic of online accessibility fits perfectly with ICSPS's commitment to assisting the community college system in increasing educational equity across the state.

World Wide Web Consortium's
4 Principles of Accessibility

- **Perceivable** - Information and user interface components must be presentable to all users in ways they can perceive. They cannot be invisible.
- **Operable** - User interface components and navigation must be operable. the interface cannot require interaction that a user cannot perform
- **Understandable** - Information and the operation of user interface must be understandable.
- **Robust** - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.
  (as technologies and user agents evolve, the content should remain accessible)

Federal Legislation Governing Online Accessibility

Section 504 of the Rehabilitation Act

"No otherwise qualified individual with a disability in the United States... shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

This statement applies to all programs receiving federal funding. Lack of access to information is considered a form of discrimination.

Section 508 of the Reauthorization of the Rehabilitation Act

This element of the Rehabilitation act clarifies the meaning of 504 related to electronic communication. Its purpose is to ensure "when Federal agencies develop, procure, maintain, or use electronic and information technology, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities."

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act does not directly deal with the internet or web based technologies. Yet, both Title II and Title III are applicable.

Illinois Legislation Governing Online Accessibility

Illinois Information Technology Accessibility Act (IITAA)

Requires Illinois agencies and universities to ensure that their web sites, information systems, and information technologies are accessible to people with disabilities.

- Specifically defines the a range of disabilities that must be accommodated

- People with Limited Vision
- People who are Blind
- People with Hearing Loss
- People who are Deaf

- People with Limited Speech
- People with No Speech
- People with No Speech
- People with No Reach or Touch

The IITAA expands upon the requirements of 508. It provides what, why and how guidance for all of its compliance standards. Additional requirements are drawn heavily from a WC3 guidance document that is cited explicitly in 508 as a standard of accessibility. However, 508 seems to address priority 1 issues while the IITAA expands their guidance to other best practices.

What are the Standards?

The full standards can be found via the following links:

Section 508: https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards

IITAA: http://www.dhs.state.il.us/IITAA/IITAAStandards.html

WC3: provides web content accessibility guidelines that go beyond the legislative requirements and provide a series of best practices. https://www.w3.org/TR/WCAG20/

Making Accessible PowerPoint Presentations

Basic Steps:

- Use built-in slide layouts
- Add Alt text to all images and tables
- Use accessibility check before delivering content.
- Fill out document properties identifying author and title before saving
- Save with tags

Advanced Features

- Built-in list formatting
- Page numbering
- Tables and charts
- Group complex images
- Touch-up reading order
- Conversion to accessible PDF

Accessible Slide Example

Figure 1: Section of Department Schedule

Department Code	Class Number	Section
Bio	101	A
Bio	101	B
Bio	201	A
Chem	101	A
Chem	101	B

Figure 2: Student Enrollment by course.

Accessible features used:
1. Slide layout
2. Alt text
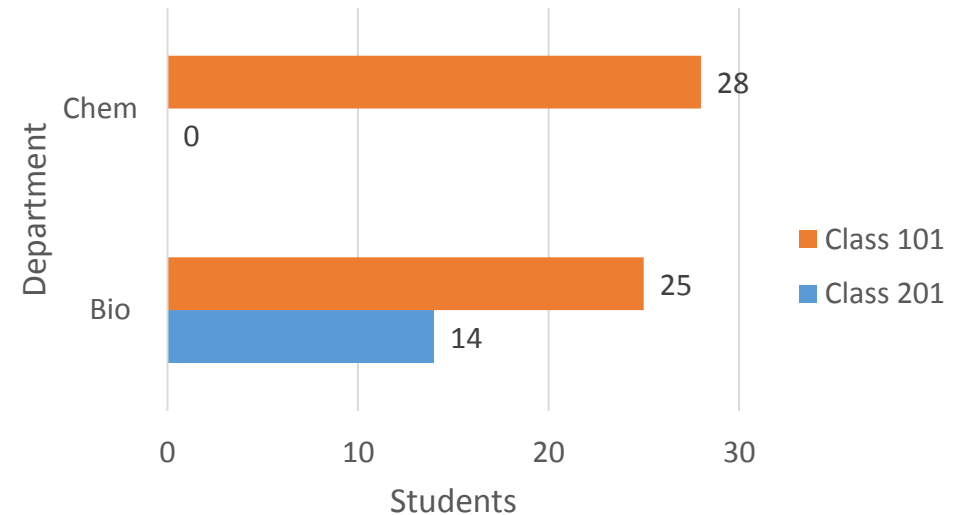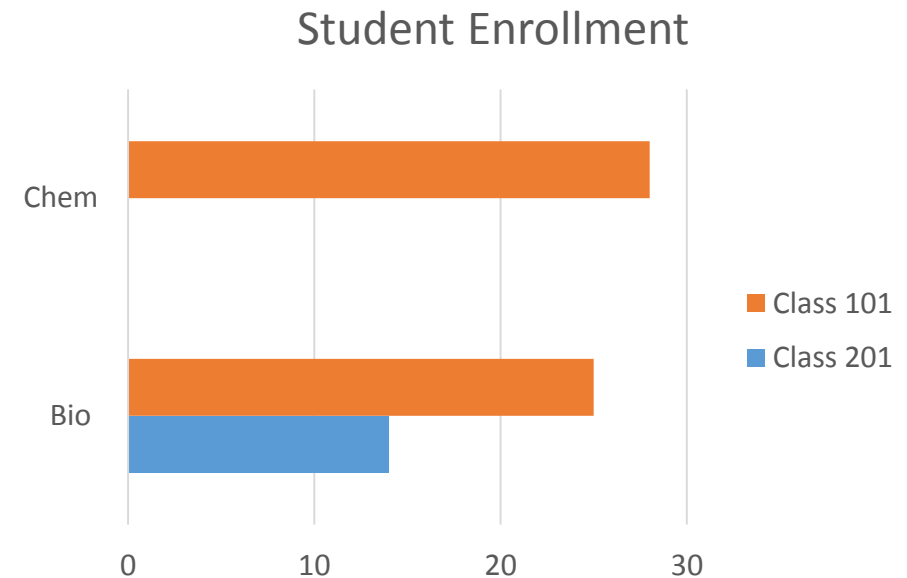3. List formatting
4. Table formatting
5. Page numbering

Figure 2 information :Student Enrollment by course
Bio 101 = 25 Students;
Bio 102 = 14 Student;
Chem 101 = 28 Students

Inaccessible Slide

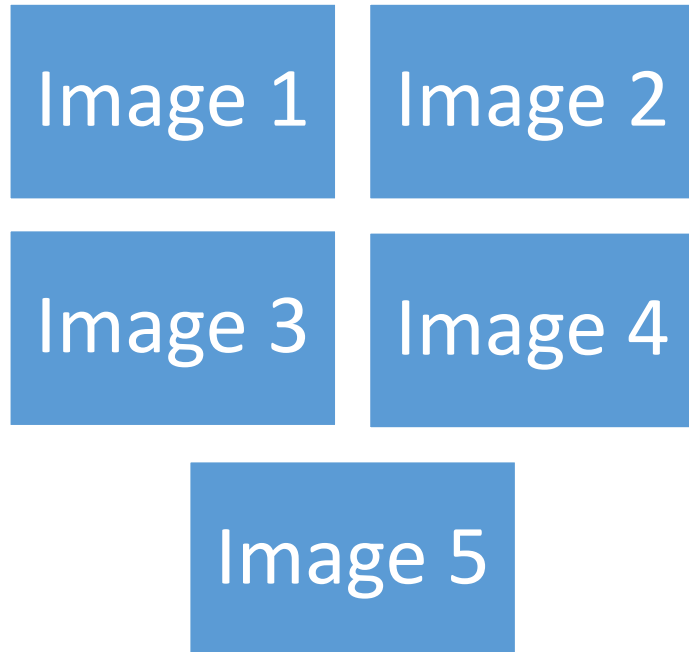| Department Code	Class Number	Section
Bio	101	A
		B
	102	A
Chem	101	A
		B

Student Enrollment

Inaccessible formatting
1. Slide layout
2. Complex table
3. No alt text or explanation of chart data
4. Lists manually entered
5. Page number added with text box

Complex Images

Alt Text on Grouped Complex Graphic

Image 1   Image 2

Image 3   Image 4

Image 5

Alt Text on Individual Elements of Complex Graphic

Image 1   Image 2

Image 3   Image 4

Image 5

To group complex images select all images in a series (Shift+click), Shift+left click for the dropdown menu, then select group icon

Accessibility in Other MS Office Documents

- Follow the same basic rules for all forms of MS Office.
- User Interfaces Have Parallel Designs to create a consistent user experience.
- If you cannot find a menu use the search feature.

Unique Issues

Excel: Tables must be created using the table feature.

- Do not simply create a table using the default cell layout because it will lack structure tags.

Word: heading text and column formats to provide tagging in the document to assist navigation by assistive technology.

- Use the navigation pane to check heading tags in your document, and turn on style pane to see formatting mark up.
- You can modify the look of these heading formats.
- Columns provide proper structure that textual areas made by manipulating spaces lacks
- Turn off auto-hyphenation
- Place graphics "In-line with text"

PDF accessibility

PDF Accessibility Checker

- Located under the "Advanced" menu – Accessibility – Quick Check
- Checks alt tags, structural elements, contrast ratios, and other accessibility issues and prompts directs you on how to fix them.

Touchup Reading Order

- Located under the "advanced" menu – Accessibility – Touchup Reading Order
- Allows you to edit reading order of text for a text reader. Order usually set by order in which content was created, not by logical structure.

Touch Up Object

- Located under the "tools" menu – Advanced Editing - Touch Up Object
- Allows adjustment of images, their alt text, and tags.

Sources

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