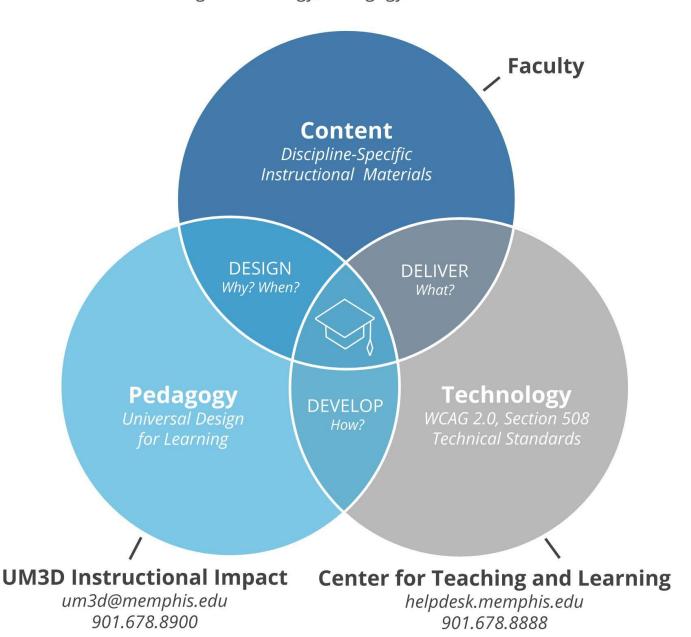


Reaching All Learners

Designing Accessible Course Materials

Collaborative Framework for Accessible Course Design

through Technology, Pedagogy, and Content¹



"The purpose of education is not to make information accessible, but to teach students how to transform accessible information into useable knowledge." ²



Adapted from Koehler, M. J., & Mishra, P. (2008). Introducing tpck. Handbook of technological pedagogical content knowledge (TPCK) for educators, 3-29.

² Rose, D. H., & Gravel, J. W. (2010). Universal design for learning. In P. Peterson, E. Baker & B. McGraw (Eds.), International encyclopedia of education (pp. 119-124). Oxford: Elsevier

Reaching All Learners Creating an Accessible Syllabus

Syllabus

The following elements are common items to consider when creating accessible documents like the course syllabus using MS Word, PDF or eCourseware HTML. These items ensure the ability of the learner to quickly find information whether reading it on the screen, on paper, or with an audio screen reader. The preferred format for a syllabus delivered online is eCourseware HTML.

Heading Styles

Syllabus section titles should properly use Heading styles to provide an outline structure.

Table Captions and Headers

Tables should only be used to organize columns of correlated information or data. Tables should also have a specified header row containing column labels.

Alternative Text for Images

Alternative text descriptions (alt-text or captions) are provided for any images which convey meaning.

Links to Learner Resources

Syllabus contains or links to relevant course-specific and campus resources such as the library, academic policies, and disability support services.

Syllabus

Prefix 1010: Course Title Syllabus

Instructor: John Smith

Office location: Brister Hall 200

Telephone: 901-678-9999

E-mail: Click Here

Course Information

COURSE DESCRIPTION

A brief statement describing the nature of the course, what the student can expect to learn, and an overview of course activities such as teamwork, group projects, student web pages, etc.

COURSE OBJECTIVES

The course objectives should be stated clearly so that they can be related to the expected learning outcomes in each section or module of the course and to the goals of the overall assessment process.

PREREQUISITES AND COREQUISITES

A list of all course prerequisites with a statement of why the prerequisites are deemed necessary.

Not Accessible

The example shown above is **not accessible** because of the following: **Serif font** (Times New Roman) was used for all text, the header font (Prefix 1010...) was increased to size 22 instead of using the **Heading 1 style** and the link to the email was not distinguished with appropriate descriptions.

Syllabus



🚹 Heading 1 used to format title

font

Prefix 1010: Course Title Syllabus

Instructor: John Smith

Office location: Brister Hall 200 Telephone: 901-678-9999

distinguishable

Course Information

1 Heading 2 used to format section header font

COURSE DESCRIPTION

A brief statement describing the nature of the course, what the student can expect to learn, and an overview of course activities such as teamwork, group projects, student web pages, etc.

COURSE OBJECTIVES

The course objectives should be stated clearly so that they can be related to the expected learning outcomes in each section or module of the course and to the goals of the overall assessment process.

Accessible

| Guideline | Met | | |
|--|-----|----|-----|
| Apply heading and paragraph styles. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid using "click here" to identify links. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

Creating an Accessible Syllabus using MS Word

| Guideline | Met | | |
|--|-----|----|-----|
| Apply heading and paragraph styles. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid using "click here" to identify links. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

Headings

Guideline: Apply heading and paragraph styles

Good heading structure helps readers to understand how the document is organized. Assistive technology users can move between headings, which makes navigation usable and more efficient than without headings. Headings and subheadings should be identified as such using the built-in heading features of the authoring tool. *If you find yourself needing to use more than three levels of headings, you may want to revisit chunking the content for easier readability. Headings should form an outline of the page and be used in the table of contents (TOC) for long documents:



- Select the text that you want to make into a heading.
- 2. Go to the **Home tab**.
- In the Styles group, choose the appropriate heading level from the Styles gallery.

Creating an Accessible Syllabus using MS Word

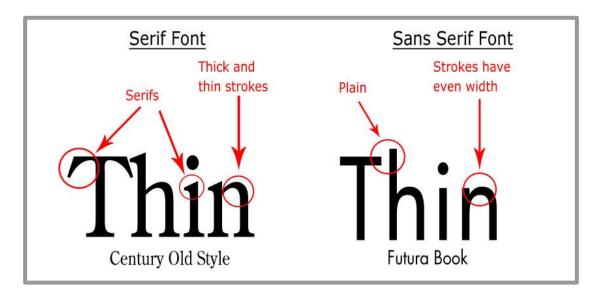
| Guideline | | Met | |
|--|-----|-----|-----|
| Apply heading and paragraph styles. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid using "click here" to identify links. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

Fonts

Guideline: Use sans-serif fonts for all text.

Use **sans-serif fonts** for all text. These font types will help make your text more legible to all learners, including students with visual impairments. **Common sans serif fonts include Arial, Calibri, Trebuchet, and Helvetica.**

Serif fonts have semi-structural details or small decorative flourishes on the ends of some of the strokes that make up letters and symbols. It is this characteristic that makes the font in this font family difficult to read. **Common Serif fonts include Times Roman, Courier, New Century Schoolbook, and Palatino.**



Creating an Accessible Syllabus using MS Word

| Guideline | | Met | |
|--|-----|-----|-----|
| Apply heading and paragraph styles. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid using "click here" to identify links. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

Links

Guideline: Avoid using "click here" to identify links

All hyperlinks should be descriptive in nature, and provide students information about the linked website or resource. If you think students will be printing the document and you want them to have the URL, put the link in parentheses after the link, but don't hyperlink it. From the example, Email: jsmith@memphis.edu (Click to email Professor John Smith)

Screen reading software can pull up all of the links in a page to aid the learner in navigating the page more quickly. If a link pulled up by the screen reader is an ambiguous phrase like, "click here" the screen reader user will not know where that link goes.

Prefix 1010: Course Title Syllabus

Instructor: John Smith

Office location: Brister Hall 200

Telephone: 901-678-9999

E-mail: Click Here

Course Information

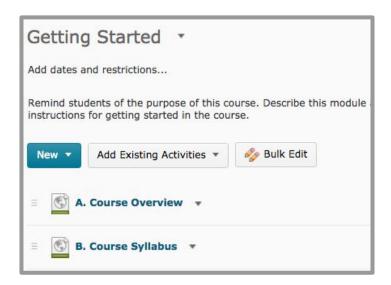
Creating an Accessible Syllabus using eCourseware HTML

| Guideline | Met | | |
|---|-----|----|-----|
| Provide descriptive module and topic headings. | Yes | No | N/A |
| Use the toolbar to format paragraph text and headings. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

Module/Topic Headings

Guideline: Provide descriptive module and topic headings.

To create the framework for designing accessible modules and topics in eCourseware, it is important to provide descriptive module and topic headings. Providing module or topic descriptions, such as Week 1 and Week 2, can help students with the sequence of instruction, but they do not provide information about the content.



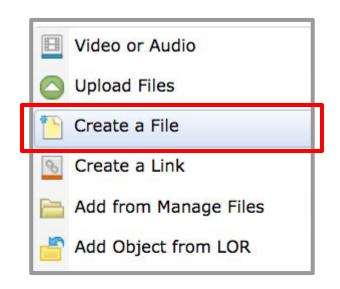
Creating an Accessible Syllabus using eCourseware HTML

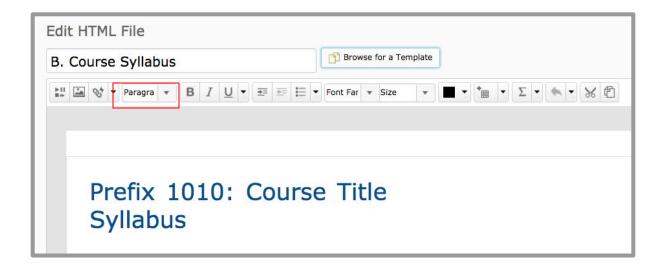
| Guideline | Met | | |
|---|-----|----|-----|
| Provide descriptive module and topic headings. | Yes | No | N/A |
| Use the toolbar to format paragraph text and headings. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |

eCourseware Create a File Guideline: Use the toolbar to format paragraph text and headings.

To create a file in eCourseware, you will need to:

- 1. Click Content
- 2. Create Module
- Click New
- 4. Click Create a File
- 5. Draft document using the correct formatting of paragraph text and headings





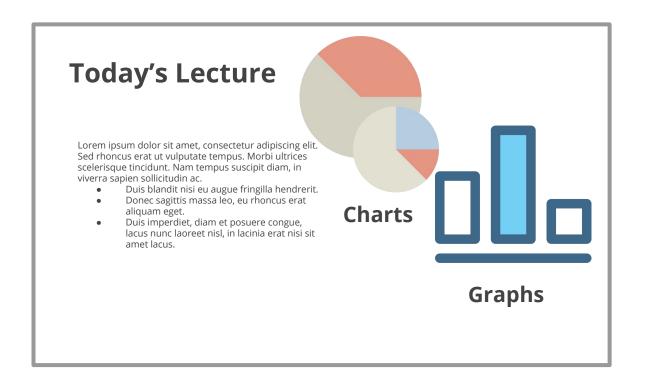
Reaching All Learners Creating Accessible Course Materials

Course Materials

The transferable skills required to make MS Word and eCourseware HTML files accessible apply to other document authoring tools. Course materials and handouts like PowerPoint presentations and PDF documents are important tools for instruction and powerful communication tools used in most courses.

Without careful consideration of the creation of these resources, we have found that they are often inaccessible to learners who are blind or visually impaired. In this section, we will focus on the guidelines for creating accessible course materials.

| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Provide captions or summaries to describe the content of of all tables. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |



| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Provide captions or summaries to describe the content of of all tables. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |

| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Provide captions or summaries to describe the content of of all tables. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |

Images and Graphics (Graphs, Maps & Shapes)

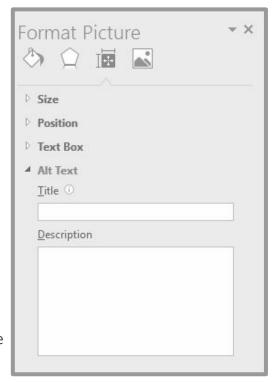
Guideline: Apply alternative text descriptions for all instructional and non-instructional graphics

Alternative text descriptions of images (ALT text) allows screen reader users to benefit from the information being conveyed by an image. **Within MS PowerPoint:**

- 1. **Right-click on the image** and select **Format Picture**. A dialog box will appear.
- 2. Select **Alt Text** on the sidebar.
- 3. Enter appropriate alt text in the **Description field**, (**not the Title field**).

Appropriate alt text is a succinct description of why you are including the image.

4. **Click the Close button** (in MS PowerPoint 2010 for Windows) or OK button (in MS PowerPoint for Mac) when done.

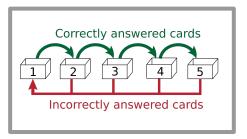


| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Provide captions or summaries to describe the content of of all tables. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |

Color

Guideline: Avoid using color as the sole method of distinguishing different elements of an instructional graphic

Don't use color alone to make a distinction, a comparison, or to set something off or apart from the rest of the image. If you categorize something by color alone, those who are color blind or blind will not be able to benefit from the information.



Text as Graphic

Guideline: Avoid providing instructional text via a graphic.

Text that is not directly related to an image or parts of an image should be provided in a readable format. Instructional text provided within an image alone will be inaccessible to students with visual impairments, and create barriers for all students accessing course materials in a variety of ways.



| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Provide captions or summaries to describe the content of all tables. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |

Specify column header information in Excel tables

Guideline: Provide captions or summaries to describe the content of all tables

Designating column headers in a data table (not a table used for layout) is essential to screen reader users understanding how the information is laid out.

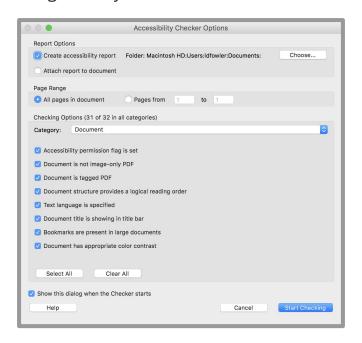
- 1. Place cursor anywhere in the table.
- 2. Two Table Tool tabs will appear in the Ribbon.
- 3. Click on the Design table tool tab.
- 4. In the Table Style Options group, check the Header Row checkbox.
- 5. Now the cells in the top row of your table make up the headers for the columns below them.

Table 1

| Heading 1 | Heading 2 | Heading 3 |
|-----------|-----------|-----------|
| Data 1 | Data 4 | Data 7 |
| Data 2 | Data 5 | Data 8 |
| Data 3 | Data 6 | Data 9 |

Creating Accessible Course Materials Using Adobe PDF

Adobe Systems PDF is a graphical file that is an exact image of a document originally created by another application (e.g., MS Word file) and then converted by other software (e.g., Adobe Acrobat) into PDF format. A PDF document can be viewed using a PDF reader (e.g., Adobe Reader), which allows users to view a PDF document, enter information (where applicable), and enlarge the viewing area of the document.



Automated Accessibility Testing is available in **Acrobat Pro XI**. To access this software, visit <u>ITS Adobe documentation</u> at http://www.memphis.edu/umtech/solutions/software/adobe.php. Acrobat includes a "Full Check" for accessibility. Different from previous versions, the Full Check no longer includes Section 508 criteria, but rather, uses a new set of standards Adobe has adopted to help deliver a more accessible experience.



General Media Conditions for Accessibility

The concepts for accessible digital information transcend any single authoring software application. Following are the universal access strategies for different types of digital media across all technology platforms:

- Text Semantic Structure (Heading Styles, list styles, etc.)
- Images Textual Descriptions
- Audio Transcripts
- Video Captions
- Meets applicable WCAG 2.0 A & AA Checklist
 (http://webaim.org/standards/wcag/checklist), EPub3 (eTextbooks/interactives)
 accessibility guidelines (http://www.idpf.org/accessibility/guidelines/) and Section 508
 accessibility guidelines (http://webaim.org/standards/508/checklist)

Specific Media Format Considerations for Accessibility

MS Word

- Use the styles and formatting options to identify headings.
- Avoid using tables or text boxes to control layout and positioning of MS Word documents.
- Use the column tool for multi-column layouts.
- Include text descriptions when adding content-rich images.
- Specify column and row headers for data tables.
- Use the Accessibility Checker.

PowerPoint

- Use the PowerPoint templates within the application.
- Add your text descriptions to images.
- Use the OUTLINE view.
- Use the Accessibility Checker.
- If using audio narration, export to digital video and caption.
- Consider saving the presentation as an accessible PDF.
- If recording PowerPoint as a video, always provide a captioned version.

Fxcel

- Provide clear and meaningful labels for rows/columns.
- Include text descriptions for charts and graphs.
- Create a supplemental text document listing relevant formulas and/or macros.
- Highlight key data and use comment areas when available.
- Define parameters for datasets (ex: lowest/highest values, specific rows or columns that define the dataset).

PDF

- Start with accessible MS Office documents.
- Retain advanced tagging information.
- Use the "Create Accessible PDF's "option from the "Action Wizards" menu.
- Use the Touch-up Reading Order Tool to edit specific content accessibility and heading hierarchy.
- Use the Order Panel to correct or establish correct sequencing of content.
- Reading order of PDF can be evaluated by using the "Save As..." and "Text (Accessible)" option.

HTMI

- Use heading styles appropriately.
- Provide alternate text descriptions for images.
- Indicate headers for columns and rows of data tables.
- Do not nest data tables within other data tables.
- Include long descriptions for complex charts, graphics, illustrations, etc.
- Maintain acceptable color contrast to allow discrimination between foreground and background information.
- Preserve logical tab order for form fields and interactive content.
- Ensure correct sequencing of content.
- Support progressive enhancement for representation in mobile context.

Audio

Transcript available

Digital Video

- Ensure that all audio content is represented by the captions.
- Follow recommended guidelines for captioning from the Digital Captioned Media Program: http://www.dcmp.org/captioningkey/
- Whenever possible, provide a separate text transcript for keyword searchability.

Software and other learning Technologies (MyLab, etc.)

Meets applicable WCAG 2.0 A & AA Checklist
 (http://webaim.org/standards/wcag/checklist), EPub3 (eTextbooks/interactives)
 Accessibility Guidelines (http://www.idpf.org/accessibility/guidelines/) and Section 508
 accessibility guidelines (http://webaim.org/standards/508/checklist)

Word Documents and Non-HTML Files

- Web AIM Resource for Creating Accessible MS Word document http://webaim.org/techniques/word/
- Creating accessible Excel workbooks https://support.office.com/en-us/article/Creating-accessible-Excel-workbooks-6cc05fc5
 -1314-48b5-8eb3-683e49b3e593?ui=en-US&rs=en-US&ad=US
- Web AIM Resource for PowerPoint Accessibility -<u>http://webaim.org/techniques/powerpoint/</u>
- Web AIM Resource for PDF Accessibility http://webaim.org/techniques/acrobat/
- National Center on Disability and Access to Education Creating Accessible Microsoft PowerPoint 2011 Presentations (Mac) http://ncdae.org/resources/cheatsheets/powerpoint-mac.php
- National Center on Disability and Access to Education Microsoft PowerPoint 2007/ 2010 Presentations - http://ncdae.org/resources/cheatsheets/powerpoint.php

eCourseware/ HTML Files

- Brightspace Accessibility Topics for Learning https://documentation.desire2learn.com/en/Accessibility
- Brightspace Accessible HTML Templates -https://documentation.desire2learn.com/en/accessible-html-templates

Images

Add alternative text to a shape, picture, chart, table, SmartArt graphic, or other object - https://support.office.com/en-us/article/Add-alternative-text-to-a-shape-picture-chart-t-
 able-SmartArt-graphic-or-other-object-44989b2a-903c-4d9a-b742-6a75b451c669

Tables

- Creating Accessible Excel Workbooks https://support.office.com/en-us/article/Creating-accessible-Excel-workbooks-6cc05fc5
 -1314-48b5-8eb3-683e49b3e593
- Find and Fix Accessibility Issues in An Excel Workbook (Video) https://support.office.com/en-us/article/Video-Find-and-fix-accessibility-issues-in-a-workbook-498a5570-0f93-4040-be45-dafd27c2f15c

Video & Audio

YouTube

- YouTube Captions and Subtitles (Video) https://youtu.be/QRS8MkLhQmM
- Google Creator Academy: Best Practices for Closed Captions and Subtitles Course
 - https://creatoracademy.withgoogle.com/creatoracademy/page/lesson/captions
- YouTube Add Subtitles and Captions https://support.google.com/youtube/answer/2734796?hl=en
- YouTube Edit or Remove Captions https://support.google.com/youtube/answer/2734705

Ensemble Video

- Ensemble Video How to Caption Content with Automatic Sync Integration-http://support.ensemblevideo.com/how-to-caption-content-with-automatic-syn-c-integration/
- Closed Captioning with Ensemble Video Tutorial -http://support.ensemblevideo.com/wp-content/uploads/2012/09/EnsembleVideoTutorial-v3.pdf

Reaching All Learners Appendix

Accessible Course Materials Checklist

The following checklist is designed to help faculty align course materials to accessibility standards. These guidelines address relevant components of the WCAG 2.0 Guidelines and have been aligned to recommendations within the Universal Design for Learning Principle Multiple Means of Representation.

Documents and Non-HTML Files

| Guideline | | Met | |
|--|-----|-----|-----|
| Apply heading and paragraph styles. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid instructions that rely on shape, size, or visual location. | Yes | No | N/A |
| Avoid using color alone to convey meaning. | Yes | No | N/A |

HTML Files

| Guideline | Met | | |
|--|-----|----|-----|
| Provide descriptive module and topic headings. | Yes | No | N/A |
| Use the toolbar to format paragraph text and headings. | Yes | No | N/A |
| Use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |
| Avoid using color alone to convey meaning. | Yes | No | N/A |
| Avoid instructions that rely on shape, size, or visual location. | Yes | No | N/A |

Links

| Guideline | Met | | |
|--|-----|----|-----|
| Provide links that are descriptive and distinguishable from other links. | Yes | No | N/A |
| Avoid using color alone to distinguish links from surrounding text. | Yes | No | N/A |
| Avoid using "click here" to identify links. | Yes | No | N/A |

Accessible Course Materials Checklist

Images

| Guideline | | Met | |
|--|-----|-----|-----|
| Apply alternative text descriptions for all instructional and non-instructional graphics. | Yes | No | N/A |
| Avoid using color as the sole method of distinguishing different elements of an instructional graphic. | Yes | No | N/A |
| Avoid providing instructional text via a graphic. When text is necessary, use sans-serif fonts (i.e. Arial, Calibri, Verdana, Trebuchet) for all text. | Yes | No | N/A |

Tables

| Guideline | | Met | |
|---|-----|-----|-----|
| Provide captions or summaries to describe the content of of all tables. | Yes | No | N/A |
| Avoid using tables for the sole purpose of formatting/layout. | Yes | No | N/A |
| Avoid displaying tables as graphics. | Yes | No | N/A |

Video and Audio

| Guideline | | Met | |
|---|-----|-----|-----|
| Identify audio and video via accessible text. | Yes | No | N/A |
| Provide text transcripts for all audio and video content. Ensure video transcripts are descriptive. | Yes | No | N/A |
| Provide audio descriptions not in the original audio track for all visual content in videos. | Yes | No | N/A |
| Ensure all videos are captioned. | Yes | No | N/A |
| Avoid flashing or blinking content in all videos. | Yes | No | N/A |

Glossary

Accessibility. "Accessible" means that individuals with disabilities are able to **independently engage** in the same interactions, and enjoy the **same services** within the **same time frame** as individuals without disabilities, with substantially equivalent ease of use.

Accessible Informational Materials and Technology (AIMT). AIMTs are items created, purchased or identified, with accessibility in mind, to serve in instruction and/or communicate information both in the curricular and non-curricular setting. These items may include, but are not limited to: textbooks, library media, informational software content, eBooks, CD-ROM, DVDs, videos, slides, films, filmstrips, learning laboratories, recordings, manipulatives and consumables, ITV (Interactive Television), handouts, presentations, and syllabi.

Accessible course materials. Accessible course materials are a subset of AIMTs **created**, **purchased or identified with accessibility in mind, to serve explicitly in instruction** and communicate information in a curricular setting of the UofM. Designing such materials encourages thoughtful, **proactive design** of accessible learning environments.

Accommodation. An accommodation is **provided on an** *individual* **basis** to students with **documented disabilities** and may involve: additional exam time, classroom note-takers, faculty-provided written notes, assistance with learning strategies and study skills, alternative formats for exams, and adaptive technology and equipment.

Blended learning. Blended learning is defined on our campus as learning in which students are engaged in a course where up to **25% of instruction is delivered online**. At UofM, blended instruction should be delivered through our learning management system (LMS) and a variety of tools within the LMS. All faculty should, at minimum, incorporate a **welcome message** on the homepage of their course; an **accessible syllabus**; and the **gradebook** as a means of helping students to monitor progress.

Learner diversity. Research in the cognitive sciences suggests the "average" or "typical" learner may not exist (Meyer at al., 2005); instead, learners may vary as significantly as the "the interactions among modules in our brains" (Gardner, 1983). **Learner diversity** (or learner variability) is a term **inclusive** of the **broader body of learners** at our institution **as well as students who may be marginalized by a disability or specific learning need**. "One of the clearest and most important revelations stemming from brain research is that there are no 'regular' students. The notion of broad categories of learners—smart, not smart; disabled, not disabled; regular, not regular—is a gross oversimplification that does not reflect reality. By categorizing students in this way, we miss many subtle and important qualities and focus instead on a single characteristic" (Meyer & Rose, 2005, p. 38).

Glossary

Perceivable. Operable. Understandable. Robust. (POUR). The POUR guidelines are intended to assist individuals **developing web materials with alignment to the Web Content Accessibility Guidelines** (WCAG) 2.0. The Accessible Course Materials checklist has been aligned to several of these key guidelines as relevant to course design.

Students with disabilities (SWDs). The Americans with Disabilities Act (2009) defines a person with a disability as: (a) someone who has an **impairment that limits one or more major life activities**; (b) an individual with a **history or record of such impairments**; or (c) an individual who is **perceived to have such impairment**. The types of disabilities exhibited among students in the postsecondary setting may include, but are not limited to: specific learning disabilities, Attention Deficit Disorder (ADD)/ Attention Deficit Hyperactivity Disorder (ADHD), mobility limitations, and mental illness/ psychological/ psychiatric conditions. Of the distribution of disabilities among students with disabilities at four-year institutions, **specific learning disabilities** and **ADD/ADHD** may be the most commonly reported.

Transcripts and Captions. A **transcript** provides a written version of content that has been presented in audio, visual or audiovisual format. **Captions** are words that are displayed on a screen to describe audio content.

Universal Design for Learning (UDL). According to UDL on Campus (2015), UDL is an "educational framework that guides the design of learning goals, materials, methods, and assessments as well as the policies surrounding these curricular elements with the diversity of learners in mind." Universal Design for Learning is distinct from other areas of Universal Design (UD) in that it focuses explicitly on the learning process and addresses the following three principles: multiple means of representation, multiple means of expression, and multiple means of engagement. UDL focuses on the holistic design of accessible learning; for this reason, it is necessary to focus on accessible pedagogy, as well as accessible materials, when designing instruction.

Web Content Accessibility Guidelines (WCAG) 2.0. According to W3C.org, WCAG 2.0 is "a stable, referenceable technical standard. It has **12 guidelines** that are organized under 4 principles: perceivable, operable, understandable, and robust. For each guideline, there are **testable success criteria**, which are at three levels: A, AA, and AAA." The Accessible Course Materials checklist has been aligned to several of these key guidelines as relevant to course design.