

The following document is pulled from the Online Teaching Essentials series, prepared by the Digital Learning Hub at the Teaching + Learning Commons, UC San Diego.

---

## Accessibility in the Online Classroom

Enabling digital access means ensuring that software, applications, digital text, and digital media are **P**erceivable, **O**perable, **U**nderstandable, and **R**obust (POUR).

**Perceivable:** essential information is unobstructed, easily detected, and effectively presented.

**Operable:** interface is easy to navigate, able to control and operate via keyboard.

**Understandable:** information is intuitive and instructions are clear, free of jargon.

**Robust:** compatible with assistive technology.

Regarding instruction, course content should be designed to provide equal access to all learners, including learners with disabilities, learners who utilize assistive technology, underrepresented learners, and language learners. Ensuring that digital course content and multimedia are accessible reduces barriers to learning and provides equal opportunity for all students.

---

## Digital Accessibility

### 1. Text & Documents:

- **Accessible Text:** Ensure the document has accessible text that can be selected and read by a screen reader. Avoid saving text documents as images or pdf image files, which cannot be deciphered by text-to-speech screen readers. Convert PDFs into accessible text by utilizing the Optical Character Recognition (OCR) tool ( [for Adobe Acrobat](#) ).
- **Heading structure:** Use the built-in text formatting structures to identify the hierarchical order for each header (H1, H2, etc.). Headings are used by screen readers to determine key topics and allow quick jumps to important information.
- **Descriptive Links:** Use descriptive language for hyperlinks that inform the user where the link directs them to do or to view.
- **Do not use color alone:** Do not use color alone to emphasize key terms or important information. Bolded or underlined text can be distinguished by screen readers while color cannot.

## 2. Images

- **Alternative Text:** Provide meaningful text equivalent for images via the alt-text attribute or via an image caption.
- **Decorative images:** Indicate when images are purely decorative and don't carry meaning for learning.

## 3. Videos

- **Captions and Transcripts:** Provide accurate captions or the text equivalent transcript for all audio.
- **Presentation Transcripts and Subtitles:** Describe all relevant visual content in the presentation or recorded video.

## 4. Audio

- **Music:** Describe the mood of the music. For background music that is not essential to the content, indicate with a music note.
- **Lyrics:** if music contains lyrics, provide accurate captions for the lyrics.

## 5. Interface

- **Keyboard Accessible:** Design websites, software, digital documents, and digital content. to operate and navigate by keyboard.
- **Color Contrast:** Use color combinations that are high in contrast. To verify contrast, utilize [WebAim's Color Contrast checker](#)

Designing for effective and inclusive learning in the online environment includes taking into account the perceivable, operable, understandable, and robust nature of course content. Enabling these accessible features within the materials and applications that are required for learning will help to reduce barriers and enable access for learners with disabilities and universally for all learners. Students who utilize assistive technology to read and understand material, as well as students who are temporarily affected by situational challenges, will benefit from digitally accessible materials.

## References

Electronic Accessibility at UC San Diego. (2021). Accessible Design, Development, and Content. <https://accessibility.ucsd.edu/how-to/design-development-content.html>

McAlgave, K. and Rice, M. (2018). Access and accessibility in online learning. Online Learning Consortium. Retrieved from <https://files.eric.ed.gov/fulltext/ED593920.pdf>

Regents of the University of California. (2021). Transcripts and captioning. <https://www.ucop.edu/electronic-accessibility/web-developers/transcripts-and-captions/index.html>

The Regents of the University of California, Davis campus. Accessibility: Content creators. [https://accessibility.ucdavis.edu/resources/content\\_creators.html](https://accessibility.ucdavis.edu/resources/content_creators.html)

The Regents of the University of California, San Francisco campus. Digital accessibility. <https://digitalaccess.ucsf.edu/>

UC San Diego Library. (2021). Web accessibility. <https://library.ucsd.edu/about/website-accessibility/index.html>

University of Washington Accessible Technology. (2021). Accessibility checklist. <https://www.washington.edu/accessibility/checklist/>

Web Accessibility Initiative. (2021). WCAG 2.1 at a glance. Retrieved from <https://www.w3.org/WAI/standards-guidelines/wcag/glance/>

Web Accessibility In Mind. (2021). Constructing a POUR website. Putting people at the center of the process. <https://webaim.org/articles/pour/>

Wilcox, S. (2015). Accessibility training for teachers: Video accessibility. The Music Toolbox. [https://musictoolbox.org/accessibility\\_teachers\\_video/](https://musictoolbox.org/accessibility_teachers_video/)