Jorgensen, M., Fichten, C., Havel, A., Wileman, S., Harvison, M., Ruffolo, O., Arcuri, A., & Chiarelli, L. (2021, September 24). Offer inclusive course delivery with accessible materials and tools. Adaptech Research Network, E-Access Concordia. <https://adaptech.org/wp-content/uploads/CourseDelivery-and-MaterialsForWebsite.docx>

## Offer Inclusive Course Delivery with Accessible Materials and Tools

For instructors, delivering inclusive and accessible courses has become a critical component of an educator’s toolbox. Within the academic community an inclusive classroom, be it online or face to face, is essential to ensure all students have equal access to learning. By applying inclusive strategies an instructor helps their students manage technologies and learning materials that are an essential part of the education environment.

Course delivery: [Lecturing](#_Lecturing_and_Managing) - [Presenting material](#_Presenting/sharing_Material_and) – [Disability considerations](#_Disability_Specific_Considerations) | Course Materials: [Recommendations](#_General_recommendations) – [Accessibility considerations](#_Accessibility_Specific_consideratio) | [Using technology](#_Using_technology_to) | [Resources](#_Resources_<h2>)

## Inclusive Course Delivery Tips

### Lecturing and Managing your class

* Pause frequently to allow students to keep up with their note-taking and to absorb information.
* Use a microphone when necessary (if possible).
* When students ask questions or make comments, pass-around a microphone or repeat these to the entire class.
* Allow preferential seating. Some students may need to look out a window, sit close to the front, or sit near a door.
* Give students options for participating in activities and discussions.
	+ For instance, let students submit written questions or comments rather than speaking in class.
	+ Do not require students to turn on their webcams during Zoom classes.

### Presenting/sharing material and information

* Present information in multiple, complementary formats such as text, audio, video, cartoon, graph, talk, image, and chart). Using multiple methods to convey information is a good way to reach as many students as possible.
* Display information in a flexible format so that students can change features such as:
	+ The size of text, images, graphs, tables, or other visual content; The contrast between background and text or image; and the volume or rate of speech or sound.
	+ Check out: [Offer ways of customizing the display of information](https://udlguidelines.cast.org/representation/perception/customize-display) (CAST - UDL guidelines)
* Provide alternatives for auditory information, such as:
	+ Captions or speech-to-text; Visual diagrams, charts, notations of music or sound; and Written transcripts for videos or auditory clips
	+ Check out: [Offer alternatives for auditory information](https://udlguidelines.cast.org/representation/perception/alternatives-auditory) (CAST - UDL guidelines)
* Provide alternatives for visual information, such as:
	+ Provide descriptions (text or spoken) for all images, graphics, video, or animations; Physical objects and spatial models; and Auditory cues.
	+ Check out: [Offer alternatives for visual information](https://udlguidelines.cast.org/representation/perception/alternatives-visual) (CAST - UDL guidelines)
* Offer paper versions to all students and post course materials such as syllabi or handouts on the course site.

### Disability specific considerations

|  |  |  |
| --- | --- | --- |
|  | **In the classroom**  | **Examples**  |
| **1** | Face the students when you speak and make sure you’re not in shadow. | * If you are backlit, it might be difficult for students to see your face and difficult for hard of hearing students who may need to lip-read. ·
 |
| **2** | Try not to move around too much because it can:* Check out: Creating Accessible Lectures - [Tips on Lecture delivery](https://accessiblecampus.ca/tools-resources/educators-tool-kit/teaching-tips/creating-accessible-lectures/) (Accessible Campus)
 | * Be distracting;
* Make it difficult for students who are trying to lip-read; and
* Limit the effectiveness of a microphone if you are using one.
 |
| **3** | Consider allowing students to audio or video record lectures. | * Alternatively, create audio podcasts or YouTube videos of your lectures.
 |
| **4** | Verbally explain any visual elements, such as charts, graphs, images or tables that you present in class. | * Describe what they show because some students can have difficulty understanding or seeing these.
 |
| **5** | Allow students to use their personal digital technologies* Check out: [What They Do and What You Can Do: Taking Advantage of Students’ Personal Mobile Technologies in Class](https://adaptech.org/wp-content/uploads/Publication-3-April-2019-3.pdf) (PDF)
 | * For many students this is the best productivity tool.
* For others it can be a form of security in case they need help.
 |

## Inclusive Course Materials and Tools

Essential for any course is the creation and design of inclusive materials and tools.

### General recommendations

|  |  |  |
| --- | --- | --- |
|  | **For the class** | **Examples**  |
| 1 | Offer students access to both print and digital version of course texts  | E-textbooks and digital coursepacks  |
| 2 | [Structure and format material for easy readability](https://www.acrolinx.com/blog/10-tips-to-improve-content-readability-with-plain-language/)  * Check out - [How to improve the readability of course material](https://www.acrolinx.com/blog/10-tips-to-improve-content-readability-with-plain-language/) (Minkie, 2021)
 | * Use short sentences
* Use common language that will be familiar to most students
* Spell out acronyms
* Define terms that may be new to students
* Avoid or explain figures of speech, idioms, and jargon
* Write in the active voice
* Use headings and sub-headings
* Use images that help the reader understand the text
* Use the same terminology when referring to the same concepts, theories, or ideas
 |
| 3 | Develop and distribute a list of Frequently Asked Questions to students  | Make this available online. An FAQ is something that can be added to each year to address ongoing common student questions |
| 4 | Ensure that the course outline has a list of support resources for students | Can include: * The Access Centre for Students with Disabilities
* IT Training
* The service desk
* Mental health services
 |
| 5 | Label readings that are relevant and necessary to meet the intended learning outcomes as “required” readings  | Designate other readings as “supplemental”  |
| 6 | For professors uncomfortable posting Word or PowerPoint files, convert them to [EPUB](https://docs.fileformat.com/ebook/epub/)  | EPUB files will keep your information secure  |

### Accessibility Specific considerations

|  |  |  |
| --- | --- | --- |
|  | **For the class**  | **Examples** |
| 1 | Ensure that all digital materials you provide to students are in an accessible format  | * For example, before uploading PowerPoints use the [accessibility checker](https://support.microsoft.com/en-us/office/improve-accessibility-with-the-accessibility-checker-a16f6de0-2f39-4a2b-8bd8-5ad801426c7f#picktab=windows) to ensure that they are accessible for students using screen readers
 |
| 2 | Provide students with materials in multiple formats  | * Provide digital equivalents of hardcopy handouts
 |
| 3 | Ensure that all videos used in the course have captioning or a transcript  | * It is ideal to use closed captions, which students can turn on and off
 |
| 4 | Ask students for feedback about the ease of navigation and access of electronic material to be used in the course  | * Provide students with multiple options to give their feedback (e.g., during a class discussion, anonymous feedback form, via e-mail, and during office hours)
 |
| 5 | For images, graphics, and tables, make sure you have a caption explaining what it is by including alternative (Alt) text.   | * For graphics that are purely decorative, check the Alt Text box that says “make as decorative” so the screen reader doesn’t read the image name
* How to add Alt tags in: Word, PowerPoint and Excel check out
* [Add alternative text to a shape, picture, chart, SmartArt graphic, or other object](https://support.microsoft.com/en-us/office/add-alternative-text-to-a-shape-picture-chart-smartart-graphic-or-other-object-44989b2a-903c-4d9a-b742-6a75b451c669)
* How to add Alt tags in a PDF check out: [Add Alternate Text and Supplementary Information to Tags](https://www.adobe.com/accessibility/products/acrobat/pdf-repair-add-alternative-text.html) (Adobe)
 |
| 6 | Offer all handouts (e.g., Microsoft Word, Excel, and PowerPoint documents) in both the original format and PDF, to ensure that they are accessible to all students and compatible across multiple devices  | * Check the accessibility of all handouts in all formats to ensure that the content is accessible to students using screen readers and text-to-speech apps and software
 |

## Using technology to make your Course Materials more accessible

**General tips**

* If you are using Zoom for lectures, record the lecture and post a hyperlink of the recording on the course site. This will allow students who missed a class to catch up and for those who wish to review.
* Allow the use of digital accessibility tools such as:
	+ Spell checkers and grammar checkers; Text-to-speech software; and Word prediction software.
	+ Check out: [Use multiple tools for construction and composition](https://udlguidelines.cast.org/action-expression/expression-communication/construction-composition) (CAST - UDL guidelines)
* Consider offering remote / virtual office hours
	+ If this is not possible, let students know how long it will normally take you to respond to emails.

### Review these various technologies with accompanying resources

|  |  |  |
| --- | --- | --- |
| **Technology** | **How best to use it** | **Resource help**  |
| PowerPoint  | If you use PowerPoint, ensure accessibility to all students by ensuring the following:* Add alt text to all images, graphs, and tables;
* Use a sans serif font, such as Arial or Calibri;
* Use minimum 20 pt. font;
* High contrast between the text and the background; and
* Use a theme without distracting images in the background.
 | * [The Do’s and Don’ts of PowerPoints: The Universal Design Perspective](https://adaptech.org/wp-content/uploads/Marcil_SALTISE_final.pptx) (PPT download)

[Using PowerPoint](https://accessiblecampus.ca/tools-resources/educators-tool-kit/teaching-tips/using-powerpoint/) (Accessible Campus) * [Make your PowerPoint presentations accessible to people with disabilities](https://support.microsoft.com/en-us/office/make-your-powerpoint-presentations-accessible-to-people-with-disabilities-6f7772b2-2f33-4bd2-8ca7-dae3b2b3ef25) (MS support)
 |
| Captioning (videos, PowerPoint) | Use captioned videos or provide transcripts for video and audio files. Alternately, add subtitles to a video using Microsoft Stream. | * [Add subtitles or captions to your Microsoft Stream video](https://docs.microsoft.com/en-us/stream/portal-add-subtitles-captions) (MS support)
* [How to use PowerPoint captions and subtitles to present more inclusively](https://www.youtube.com/watch?v=lnwQr3jNcTg) (Video: Mike Tholfsen)
* [Present with real-time, automatic captions or subtitles in PowerPoint](https://support.microsoft.com/en-us/office/present-with-real-time-automatic-captions-or-subtitles-in-powerpoint-68d20e49-aec3-456a-939d-34a79e8ddd5f) (MS support)
 |
| Zoom  | Live caption Zoom or provide Zoom transcripts and closed captions using Microsoft Stream. | * [Closed Captions & Live Transcription | Zoom](https://www.youtube.com/watch?v=kFXokWxnH0Y) (Video: University of Michigan)
* [Add subtitles or captions to your Microsoft Stream video](https://docs.microsoft.com/en-us/stream/portal-add-subtitles-captions) (MS support)
 |
| Handouts  | Make sure all handouts and other documents are accessible (e.g., use captions, transcripts, alternative text). | [Creating Accessible Lectures](https://accessiblecampus.ca/tools-resources/educators-tool-kit/teaching-tips/creating-accessible-lectures/) (Accessible Campus) |

## Resources

**Resources for Inclusive Materials and Tools**

DO-IT. (2021, April 7). *Course accessibility checklist: a promising practice in helping instructors create accessible online learning courses.* <https://www.washington.edu/doit/course-accessibility-checklist-promising-practice-helping-instructors-create-accessible-online>

Minkie, K. (2021, July 13). 10 Tips to improve content readability with plain language. *Inclusive Language*. <https://www.acrolinx.com/blog/10-tips-to-improve-content-readability-with-plain-language/>

University of Guelph. (n.d.). *Universal instructional design (UID): A faculty workbook*. <https://opened.uoguelph.ca/instructor-resources/resources/uid-workbook-FTF.pdf>

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