



Student Guide to Open Educational Resources

We encourage individual instructors, campus technology teams, librarians, or other OER teams, to make a derivative of this guide based on technology of your campus (software used, physical campus resources such as computer labs or computer stations, printing/photocopying setup, etc.).

Welcome to the Minnesota State Student Guide to Open Educational Resources (OER). This guide has been created to provide guidance and support for students who are taking a course that includes OER materials.

What are OER?

Minnesota State relies on the [William and Flora Hewlett definition of OER](#):

“OER are teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, texts, software, and any other tools, materials or techniques used to support access to knowledge.”

This guide provides the following information on OER:

- [How to access course OER](#)
- [How to engage with course OER](#)
- [Recommendations for storing course OER](#)
- [Different methods for printing course OER](#)
- [Answers to frequently asked questions about OER](#)
- [Additional resources on OER](#)

Accessing OER

Accessing OER will vary depending upon where instructors store their materials.



Internet Access

It is very likely that internet connection will be needed to access OER, at least initially. Instructors may provide OER via email, in D2L Brightspace, by sharing a link within the course syllabus, etc., all of which require an internet connection for access. Most OER can be downloaded, so it is possible to visit a campus computer lab to download the material onto a personal computer or storage device. For more information about storing OER content, please visit the [Storing OER](#) section. If students can't download the material and don't have internet access away from school, it is recommended they use internet-connected computers in campus computer labs and/or libraries to access OER content.

Some OER may not be downloadable, such as videos from YouTube. In these instances, students should make plans to watch the content in the computer lab, campus library, or their local library. If students need to watch content in a public environment, consider bringing a pair of headphones to prevent the disruption of those in the immediate area.

Campus Library Resources

Some materials that instructors use may be from library databases and resources. In such instances, students can visit the campus library website or connect with a librarian for guidance on accessing these resources.

D2L

Instructors will often make OER available in D2L Brightspace, the Minnesota State learning management system. Students are able to go into their courses and access the course content. From here, students can download or save the materials to have quick access to them on preferred devices. For more information on how and where to store course content, check out the [Storing OER](#) section.

Using OER

Engaging with Course OER

OER can come in a variety of forms such as text, video, audio, and mixed media. Within each of these, there is an additional layer of variety. For instance, text could be a Microsoft Word document, a PDF, a web page or other types of text-based documents. Audio could come in the form of streaming sound or .mp3 files. Below, some tools have been identified for engaging with OER content along with recommendations about each tool.

How to Download and Use a PDF

PDF stands for portable document format, and is a file format to present documents that can be viewed, printed, and sent electronically. Many OER are available to students in PDF format, they may be found as an attachment or link in an email, or a link within your D2L course or course syllabus.

Most modern web browsers will open directly in your browser window, but you can also choose to download it to your computer or mobile device by clicking an icon in the top of the PDF that look like an arrow pointing down, see the table below for examples. To view the PDF outside a browser, you may need to download a free PDF viewer, such as [Adobe Reader](#). To learn more about where to store PDFs once downloaded, see the [Storing OER](#) section.

You can also print the PDF by clicking on the printer icon, typically found next to the download icon, see the table below for examples. Learn more about printing in the [Printing OER](#) section.

By choosing to download PDFs, you have the ability to bookmark pages, take notes, or highlight text, see the table below for examples of what these icons look like in Adobe Reader. [Learn more about annotating, adding comments, and using markup tools.](#)

Icon Example	Action Icon Signifies
	Download icons
	Print icons
	Bookmark icon
	Comment/annotate icon
	Highlight icon

Computer/Laptop

Where possible, students are encouraged to download OER onto personal computers for quick reference. By downloading, students may be able to annotate or manipulate and organize the content.

Note: If students use computers in a library or computer lab, they should save any content that is downloaded onto a thumb drive or consider other storage options – see the [Storing OER](#) section below.

Tablets and Mobile Devices

Students can download their content onto their tablets or mobile devices depending upon the storage space on the device. Students should be aware of what type of file formats the OER is in

and which application is most likely to be useful. Most content should be accessible through a web browser, but, for annotating, note-taking, and editing OER for the student's own use, it might be a good idea to find the best app for the job.

Note: If the tablet or device has a mobile data plan, it might be useful to download the OER content when students are on a Wi-Fi network to avoid going over a download or data quota.

Physical Copies

When it comes to text-based material, students have a variety of options to get the material in physical form. Students are encouraged to take a look at the [Printing OER](#) section. However, multimedia is much harder to turn into physical copies. While some audio and video content can be downloaded onto tablets and mobile devices, going beyond that to store the content would require the files to be burned onto audio CDs or DVDs.

Storing OER

What to do with OER Content

Students can access the content from the web and not download it. However, many students choose to hold onto their course content so that they can come back to it and have ready access to it, rather than going through the internet. Here are the best strategies for holding onto content for the duration of the course and beyond.

Bookmark

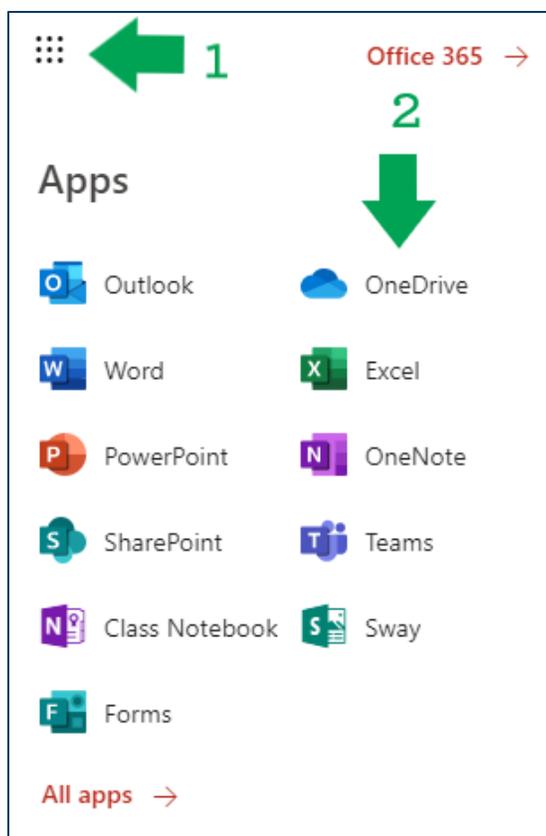
When OER content is on a web site outside of D2L Brightspace, students can always use their browser's bookmarking tool (or whatever bookmarking tool students prefer to use) to keep track of the content. Bookmarks on a campus computer rather than a personal device may not save.

Download

A lot of OER are available to download onto a computer, tablet, mobile device, or portable storage (a thumb drive or external hard drive). Students can download the content onto the storage of their choosing and organize the content in a way that is useful to them. We recommend that folders or tags are used to indicate which object goes with which week or learning unit and class.

Online Storage

Students can also elect to download the OER and upload it to their own cloud storage. Every Minnesota State student has access to a OneDrive account, which can be found once logged into the student Outlook email (<https://outlook.com/Minnstate.edu>).



Students can save materials online using their OneDrive account.

Print

In the case of text-based OER, students can print out their materials and organize them in a folder or binder. For more information about the best ways to print content, visit the [Printing OER](#) section.

Printing OER

How to Print OER Text-based Materials?

There are various options for students to consider when looking to produce physical copies of their text-based OER. This page will identify the most common options that students can use as well as some strategies for getting the most out of printing.

Note: Not all content will necessarily be able to print as listed below. Content from library databases may vary in terms of what students can download or print. Please consult a campus librarian for further clarifications on specific content.

Buy the Physical Text

In some instances, the content has already been produced into the physical text. Students are likely able to purchase the text from campus bookstores or online. Please consult the course instructor to find out if that is a possibility.

Print at Home

Students can print at home if they have access to a printer. However, depending upon how many paper pages this requires, it may be useful to take advantage of some of the other options and ideas on this page.

Print on Campus

Check to see how much printing would be at the campus library or print shop. In order to minimize how much money a student will spend on printing OER, it is in the student's best interest to make sure they prints on both sides of each piece of paper.

Central Lakes College in Brainerd, Minnesota, offers printing, binding, and shipping services for OER textbooks for a low cost. Learn more at www.clcdigitalmedia.com/oerform/

Other Printing Options

Students might also consider using a third-party printing company to print their materials. For instance, some office supply stores have a customizable service that allows for users to upload documents, arrange them, and print them at a store of the user's choosing or to be delivered for a reasonable cost.

Maximizing Printer Usage

In addition to the various printing options above, there are also some ways to manipulate documents in order to get more printing per page. Below are some common ways of getting more out of each page.

Font: Many documents default to 12 point font. Font size (and font type) can be adjusted to be smaller. Some font types are naturally bigger than others. Text in Arial 11 point may be larger than text in Calibri 11 point and may take up more space. Changing the font size or font type can increase the number of words per page and make the document potentially shorter in its total page count. This adjustment works best with word documents programs such as Microsoft Word, Apple Pages, or Google Docs.

Margins: Many documents default to 1 inch margins all around the document. Margins can be adjusted to .5 inch or smaller depending on preference. This will increase the amount of space used on each page and make the document potentially shorter in its total page count. However, the trade-off will be less margin space to jot down notes. This adjustment works best with word documents programs such as Microsoft Word, Apple Pages, or Google Docs.

Spacing: Some documents will be double-spaced. When spacing can be adjusted, it could be reduced to 1.5, 1.15, or even single spacing. This will shrink the length of the document and potentially reduce the total page count. However, the trade-off will be

that there is less space on the page to annotate and write notes. This adjustment works best with word documents programs such as Microsoft Word, Microsoft Works, Apple Pages, or Google Docs.

2 Pages per Side: In addition to printing on both sides, many document programs allow the user to print 2 pages of the document on a single side of paper. By doing so, students will be able to put 4 pages of the document onto 1 single piece of paper. This adjustment works well with web sites, PDF files, Microsoft Word, Apple Pages, Google Docs, and most other documents that can be printed.

Skip Pages: Some documents have blank pages or pages that might not be entirely necessary. It is worth looking over the document to determine if every page needs to be printed or if only certain ones are needed. This adjustment works well with any document program.

Frequently Asked Questions

Q: Why is my instructor using OER?

Your instructor may have decided to use OER content for several reasons. Faculty, like students, have become concerned about the significant rise in the cost of textbooks and see OER as an opportunity to provide rich learning content for students. Faculty also make use of OER content because they find OER to be great quality content made often by people they know or by individuals who teach and work in the related fields of study. Finally, faculty may also choose to use OER to help make the course current and fresh. Rather than relying on a book which might have old examples or references, faculty appreciate the flexibility to find newer content for their students.

Q: What is the difference between open educational resources and those described as affordable?

OER are materials that are entirely free for students to use, redistribute, and even remix. Affordable means that the cost of the learning materials has been substantially reduced and will fall under \$50. In some cases, be aware that an instructor might provide an affordable physical textbook that can be purchased in the bookstore but has also made the eBook available for free online. In this case, the eBook is considered an open educational resource, but the physical textbook in the store is considered affordable since students will need to pay for it.

Q: What can I do with OER?

Some OER content will be restricted according to what Creative Commons licenses it has, but you can easily look up the license here on the Creative Commons website:

<http://creativecommons.org/licenses/>. These materials are yours to keep at the end of the course and you are free to redistribute them as you wish.

Q: Do I need internet access at home for my OER course?

No. However, you will need to plan out how you plan to access your OER content. This might mean printing the content in advance or downloading the content onto a storage drive. It will make it easier to have internet access at home, but it is not necessary as long as you actively plan how to access your content at home.

Resources

- [Opendora](#): A digital archive for open educational resources that serves as a central repository for Minnesota State faculty and librarians to leverage licensed OER with the ability to access, load, and share material. Opendora allows the storage of, or linking to, course content including textbooks, lecture notes, syllabi, reading lists, and videos.
- [Open Textbook Library](#): The Open Textbook Library provides a growing catalog of free, peer-reviewed, and openly-licensed textbooks.
- [Creative Commons](#): This site offers explanations and resources around understanding Creative Commons licenses as a form of legal protection around copyrighted material, particularly material used for OER.
- [Open Education Handbook](#): This handbook provides a wealth of information about the OER movement and its uses in educational environments across the world.
- [OER Search Engines](#): This page provides links to different OER search engines so that users can look for content across several databases.

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