




# Opening Knowledge

Resources for Open Research and Teaching at  
Virginia Tech and Beyond

*Open Knowledge Committee, University Libraries*  
*June 2022*



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# The Language of Open

## Open Access

**Open access** refers to peer-reviewed research that is openly available and openly licensed. Open access can be achieved by publishing in an open access venue or archiving a version in an online repository.

## Open Source

**Open source** refers to software that is free to use and reuse at no cost. Open Source software is made openly available under a license that allows anyone to access, use, share, and modify it without needing to ask permission.

## Open Data

**Open data** refers to data that is openly available and openly licensed. Open data is free to everyone to use and re-use as they want, without restrictions.

## Open Education

**Open Education** includes tools, practices, and resources that leverage knowledge sharing, technology, open licenses, and collaboration in service of learning. Open Educational Resources (OER) are freely and publicly available teaching, learning, and research resources (e.g. simulations, textbooks, or videos) in the public domain or openly licensed.

## Open Licenses

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# Open Access - Open Knowledge at VT

At the University Libraries we've always been committed to the principle of access — access to information across a wide spectrum of disciplines in service to the Virginia Tech community. Today this commitment to access remains stronger than ever, further emboldened by the advent of new technologies that make possible unprecedented distribution of knowledge via the Internet, free of charge to all scientists, scholars, teachers, students, and other curious minds throughout the world.

We believe that openness is the future of higher education. Openness ensures greater dissemination, inclusiveness, and integrity for the advancement of knowledge and the education of the next generation. While not all knowledge can be open, we believe that the vast majority can and should be.

This booklet introduces a few of the many open resources you can find in and through the Library. The first section, “For Scholars,” highlights the wealth of open scholarship in the Library’s collections as well as tools we make available to researchers for writing and publishing open scholarship. The second section, “For Instructors and Students,” focuses on tools and resources specifically aimed at making learning accessible, abundant, and customizable for all.

These resources, tools, and services, plus a great deal more, can be found on the Library website by visiting [lib.vt.edu/open-access](http://lib.vt.edu/open-access) and Open@VT, [blogs.lt.vt.edu/openvt](http://blogs.lt.vt.edu/openvt).

Throughout the booklet tools and resources marked in grey, orange, and maroon indicate the following:



**Maroon** are resources created at VT.



**Orange** are resources provided by VT.



**Grey** are tools supported by VT.

# For Scholars

**Open access** allows for researchers all over the world to find a publication online and cost-free. Scholarship can be made open access in two ways, through publishing or depositing a version.

Over the years the Library has allocated a growing portion of the collections budget to the production and the unlatching of open access scholarship. We believe that by supporting these open access efforts we are promoting innovation, diversification of scholarly publishing models, and reducing barriers to information. Here are some of the initiatives we support.



Virginia Tech's new **Open Access Policy** enables authors to legally provide open access to the accepted version (not the journal's published version) of the scholarly article, regardless of what your copyright transfer agreement says (a very small number of publishers may require you to waive the policy). Find out more at [guides.lib.vt.edu/oapolicy/](https://guides.lib.vt.edu/oapolicy/).



**VTechWorks** is Virginia Tech's research repository and contains more than 90,000 items including journal articles, presentations, theses and dissertations, open textbooks, and videos. Items in VTechWorks are readily discoverable because they are indexed by search engines, Google Scholar, and Unpaywall. Faculty can also use Elements (EFARs) to deposit to or claim items in VTechWorks. To register and add your work visit [vtechworks.lib.vt.edu](https://vtechworks.lib.vt.edu) or contact [vtechworks@vt.edu](mailto:vtechworks@vt.edu).



The **Virginia Tech Data Repository** makes it easy to publish your data and make it openly accessible and discoverable. (N.B. You have the option of making your datasets open immediately or upon delayed release.) The repository also provides DOIs as well as guidance in meeting funder and journal data requirements. For assistance or to upload your data visit [data.lib.vt.edu](https://data.lib.vt.edu) or contact [dataservices@vt.edu](mailto:dataservices@vt.edu).



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The Library's financial contributions to **SCOAP3** (Sponsoring Consortium for Open Access Publishing in Particle Physics) have helped convert key journals in the field of high-energy physics to open access at no cost to authors. SCOAP3 journals are open for any scientist to publish in without any financial barriers. Visit [scoap3.org](https://scoap3.org).



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**Demography** is the flagship journal of the Population Association of America. Beginning in 2020 it is published by Duke University Press as a community supported open access publication. Articles are published under a Creative Commons license (BY-NC-ND) and are open immediately upon publication. Authors are not charged any fees for open access by Duke University Press and retain copyright and full publishing rights without restrictions in their articles. Readers may use the full text of articles as described in the license. Visit [read.dukeupress.edu/demography](https://read.dukeupress.edu/demography).



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The **Open Science Framework** (OSF) is a powerful tool that enables you to collaborate on research and writing, keeping all your files, data, and protocols in one centralized cloud-based location. You control which parts of your project are public or private making it easy to collaborate with the world or just your team. OSF can be connected to other tools such as Google Drive, Dropbox, and Git to share data, archive data, track project changes, assist in project management, and more. Sign in with your VT or ORCID. Visit [osf.io](https://osf.io) or [osf.io/institutions/vt](https://osf.io/institutions/vt).



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**Perma.cc** is a free open source tool to prevent link rot in your scholarship. When you give Perma.cc a URL of a webpage you want to cite, their software visits that URL, preserves what's there, deposits it into the Perma.cc collection, and gives you a unique URL (e.g. "perma.cc/ABCD-1234") that will never break. Visit [perma.cc](https://perma.cc) or [guides.lib.vt.edu/permacc](https://guides.lib.vt.edu/permacc). To sign up for an unlimited account, email [permacc@vt.edu](mailto:permacc@vt.edu).



## More tools we recommend

Use **Unpaywall** to find freely available research articles, including those from VTechWorks. Install the extension in your Chrome or Firefox browser, and when you land on a pay-walled article, look for the “unlock” tab on the right side of your browser and click. For more information or to install the extension visit [unpaywall.org](https://unpaywall.org).



**OA Button**, like Unpaywall, works as an extension in your browser to help you find millions of free research articles instantly. When you hit a paywall, the Button will either retrieve a free copy of the article or help you ask the author to deposit the article in a repository. To install the extension visit [openaccessbutton.org](https://openaccessbutton.org).



**Zotero** is a free citation manager that can be used online, on your desktop, or as a browser extension. With it, you can collect citation information from web pages and databases, and create groups to share citations. The libguide on Zotero provides additional information on how and when to cite, as well as more information on using a citation manager. Visit [zotero.org](https://zotero.org) or [guides.lib.vt.edu/citationmanagers/Zotero](https://guides.lib.vt.edu/citationmanagers/Zotero).



## Funding Opportunities Available at VT <<<<



The **Open Access Subvention Fund** subsidizes article processing fees for peer-reviewed articles accepted for publication in open access journals. All VT faculty, students, and staff are eligible. For more information, visit [guides.lib.vt.edu/oasf](https://guides.lib.vt.edu/oasf) or contact Philip Young, [pyoung1@vt.edu](mailto:pyoung1@vt.edu).



**TOME** (Toward an Open Monograph Ecosystem), a 5-year pilot project Virginia Tech is participating in, supports the publication of long-form, peer-reviewed scholarship by faculty members in the humanities and humanistic social sciences. Grants in the amount of \$15,000 (baseline) are awarded to the publisher so that an open access version of the monograph can be published online. The pilot runs through December 2022. For more information visit [openmonographs.org](https://openmonographs.org) or contact Peter Potter (Publishing Director): [pjp33@vt.edu](mailto:pjp33@vt.edu).



One example of a TOME-funded book is *A Colonial Affair* by Danna Agmon (History), published by Cornell University Press in 2017. An open access edition of the book can be found on a number of sites including Project Muse, JSTOR, and VTechWorks ([hdl.handle.net/10919/85229](https://hdl.handle.net/10919/85229)).



# For Instructors and Students

**Open Educational Practices** (OEP) leverage new ideas in teaching and learning as well as the use and creation of open educational resources to facilitate deeper engagement and learning. The University encourages and supports the use of **Open Educational Resources** (OER) because they reduce the high costs of education for students while giving instructors more freedom to create and adapt course materials through the use of open licenses. Here are a few tools for instructors and students to find and create OER followed by funding opportunities for VT faculty to customize or produce their own OER.

Virginia Tech's Guidelines for Open Educational Resources (OER) and Open Textbooks define and describe the benefits of OER, guidelines for use, standards for evaluation, and resources for faculty. The Guidelines were approved by the Virginia Tech Board of Visitors in June 2020.

[https://policies.vt.edu/assets/guidelines-for-open-educational-resources-\(oer\)-and-open-textbooks.pdf](https://policies.vt.edu/assets/guidelines-for-open-educational-resources-(oer)-and-open-textbooks.pdf)



The **OER Overview** is a Library-curated guide and an excellent starting point if you have questions about OER. It provides an overview of existing OER collections in various disciplines and also includes information about Creative Commons licenses, copyright, and the public domain. Access the guide at [guides.lib.vt.edu/oer](https://guides.lib.vt.edu/oer).



**Odyssey** is a learning object and educational resources repository created and maintained by the Library. It features videos, handouts, infographics, lesson plans, and more. Visit [odyssey.lib.vt.edu](https://odyssey.lib.vt.edu) or contact [odyssey@vt.edu](mailto:odyssey@vt.edu).



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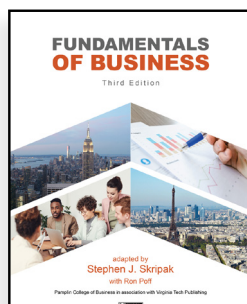
## Funding Opportunities Available at VT <<<<



Through the **Open Education Initiative Faculty Grants**, the Library supports the adaptation and creation of new, freely available, and openly licensed course material through this competitive grant program. Virginia Tech faculty are invited to apply. For complete information on the Open Education Initiative Grants, see [guides.lib.vt.edu/oer/grants](https://guides.lib.vt.edu/oer/grants).



**Fundamentals of Business** by Stephen J. Skripak with Ron Poff was adapted for Virginia Tech's MGT 1104 Foundations of Business through a collaboration between the Pamplin College of Business and the University Libraries. It is licensed with a Creative Commons-NonCommercial ShareAlike 3.0 license. The 2016, 2018, and 2020 editions of *Fundamentals of Business* are available in multiple formats and have been accessed over 1 million times worldwide, been adapted into a Canadian version, and have saved Virginia Tech students around \$650,000 in course material costs. A multiple choice testbank was also developed and is available to instructors upon request. View the latest edition at [hdl.handle.net/10919/99283](https://hdl.handle.net/10919/99283).





# Resources and Contacts





## Open Access

Open Access Guide [guides.lib.vt.edu/oa](https://guides.lib.vt.edu/oa)

Open Access Policy [guides.lib.vt.edu/oapolicy](https://guides.lib.vt.edu/oapolicy) | [openaccess@vt.edu](mailto:openaccess@vt.edu)

Open Access Subvention Fund [guides.lib.vt.edu/oasf](https://guides.lib.vt.edu/oasf)

Open Monograph Funding [pjp33@vt.edu](mailto:pjp33@vt.edu)

Virginia Tech Publishing [publishing.vt.edu](https://publishing.vt.edu) | [publishing@vt.edu](https://publishing@vt.edu)

VTechWorks [vtechworks.lib.vt.edu](https://vtechworks.lib.vt.edu) | [vtechworks@vt.edu](mailto:vtechworks@vt.edu)

Open Access Support [guides.lib.vt.edu/oasupport](https://guides.lib.vt.edu/oasupport)

## Data

Virginia Tech Data Repository [data.lib.vt.edu](https://data.lib.vt.edu)

Research Data Management [guides.lib.vt.edu/rdm](https://guides.lib.vt.edu/rdm)

Finding Data [guides.lib.vt.edu/FindData](https://guides.lib.vt.edu/FindData)

Data Services [dataservices@vt.edu](mailto:dataservices@vt.edu)

## Open Education

Open Education Guide [guides.lib.vt.edu/oer](https://guides.lib.vt.edu/oer) | [openeducation@vt.edu](mailto:openeducation@vt.edu)

Open Education Faculty Grants [guides.lib.vt.edu/oer/grants](https://guides.lib.vt.edu/oer/grants)

Odyssey [odyssey.lib.vt.edu](https://odyssey.lib.vt.edu) | [odyssey@vt.edu](mailto:odyssey@vt.edu)

## Researcher Identity

Virginia Tech Experts [experts.vt.edu](https://experts.vt.edu) | [guides.lib.vt.edu/](https://guides.lib.vt.edu/VirginiaTechExperts)

[VirginiaTechExperts](https://guides.lib.vt.edu/VirginiaTechExperts)

Tell Your Story [guides.lib.vt.edu/TellYourStory](https://guides.lib.vt.edu/TellYourStory) | [impact-services-g@vt.edu](mailto:impact-services-g@vt.edu)

ORCID [guides.lib.vt.edu/orcid](https://guides.lib.vt.edu/orcid) | [orcid@vt.edu](mailto:orcid@vt.edu)

## Persistent Links for Web References

Perma.cc [guides.lib.vt.edu/permacc](https://guides.lib.vt.edu/permacc) | [permacc@vt.edu](mailto:permacc@vt.edu)

## Staying Informed

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