

Raising OER Awareness: VT Libraries & Beyond

OpenVA
Virginia Beach, VA
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My charge (25%)

- Explore and disseminate information regarding OER
- Survey
 - 1) What librarians do
 - 2) What instructors do
 - 3) Identify OER advocates and impact on teaching/learning
- Identify opportunities for VT Libraries to lead/partner in OER initiatives

The Context



Virginia Tech

~ 3,700+ faculty

29,000 students on campus + some off campus

“Residential Undergraduate Experience”
+ plus VT Online

Tenure, academic freedom and **faculty choice**

= **Decentralized faculty decision-making**

Key Messages to Convey

WHY? “OER” is a compelling concept

WHAT is available?

WHERE to learn more/get help

HOW (and how much work is it for me?)

Key Messages to Convey

WHY? The importance of **Copyright** and the freedom of **open licensing**

WHAT? **High quality** free, online, copyright-unrestricted educational resources of **various formats** exist in **your subject area!** (Hurrah!)

WHERE? Finding OER can be challenging. **VT Libraries can help.**

HOW? OER use often requires pedagogical innovation and **adaptation**

You can **choose to share your work** by “Open Licensing” and archiving your work

What will you look for? What will you share?

The importance of **Copyright** and the freedom of **open licensing**



Molly Kleinman

The beauty of “Some Rights Reserved”

Introducing Creative Commons to librarians, faculty, and students

These are difficult times when it comes to copyright on campus. Big music companies are suing fans, publishers are suing librarians, and the principle of fair use is under siege everywhere. Litigation-happy content holders have fostered a climate of fear in which every student is a music pirate and every professor a book thief. While I don't doubt that there is some copyright infringement happening on university campuses, the bigger problem by far is the chilling effect of all these lawsuits and copyright awareness campaigns.

the moment a work is fixed in a tangible medium of expression. Now, every new work is copyrighted—lecture notes, e-mails, snapshots, doodles, presentation slides. And where once copyright lasted for 14 years, with the option to renew for another 14, now copyright lasts for the lifetime of the author, plus an additional 70 years after the author's death, for an average duration of more than a century. That's a very long time, and it leaves thousands of works orphaned: under copyright but without a locatable copyright holder. Between the fear



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Kleinman, Molly (2008) “The Beauty of ‘Some Rights Reserved’: Introducing Creative Commons to Librarians, Faculty, and Students”
College & Research Libraries News 69(10): 594-597 <http://crln.acrl.org/content/69/10/594.full.pdf>

The importance of **Copyright** and the freedom of **open licensing**

I found it on the web. I can use it – right? Um, no.

– **Free** (\$)

and

– **Free** (Openly licensed)

edit, remix/revise, redistribute;

no need to navigate fair use & copyright exemptions



See also: <http://www.knowyourcopyrights.org/bm~doc/kycrmatrixcolor.pdf>

4Rs <http://opencontent.org/blog/archives/1123> and the 5th R <http://opencontent.org/blog/archives/3251>

The importance of **Copyright** and the freedom of **open licensing**



copyright

all rights reserved

An **invitation** to learn about:

1. Copyright, a few facts
2. **Open licensing** via Creative Commons
3. Overview of **Creative Commons** licenses
4. **How to use** openly-licensed materials
5. **Finding** openly-licensed works
6. How (and **why**) to openly license



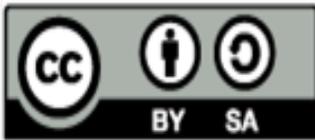
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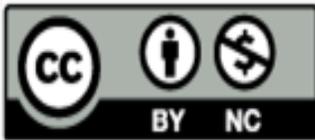
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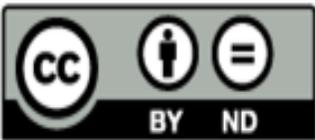
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The importance of **Copyright** and the freedom of **open licensing**

Use of **ANY** and **ALL** Creative Commons licensed works **requires attribution**

- Credit the **author** or other parties (as they specify)
- indicate the **title** & **URL** of the work (if available)
- Indicate the **license** & **URL** of the license



Examples:

"Copyright Camp" by Greg Grossmeier from <http://www.flickr.com/photos/grggrssmr/4846187035>, used under a Creative Commons Attribution-ShareAlike license: <http://creativecommons.org/licenses/by-sa/3.0> (Adapted)

OR

Adapted from "[Copyright Camp](#)" by Greg Grossmeier [CC BY-SA](#)

(See also https://wiki.creativecommons.org/Best_practices_for_attribution and making notices machine readable: https://wiki.creativecommons.org/Marking_Works_Technical)

Growing availability of relevant OER

http://www.americanyawp.com/

The American Yawp

A Free and Online, Collaboratively Built American History Textbook



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"Call for Contributors"

BEFORE 1877	AFTER 1877
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British North America	Capital and Labor
Colonial Society	American Empire

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Modern Philosophy

A Workbook with Source Material
Walter Ott
2013

Our first presupposition must be that in nature nothing acts on, or is acted on by, any other thing at random, nor may anything come from just anything else, unless we mean that it does so in virtue of a concomitant attribute. {...}

Nor again do things pass into just any old thing; 'white' does not pass into 'musical' (except, it may be, in virtue of a concomitant attribute), but into 'not-white' and not into any chance thing which is not white, but into black or an intermediate color; 'musical' passes into 'not-musical' and not into any chance thing other than musical, but into 'unmusical' or any intermediate state there may be. {...}

It does not matter whether we take attainment, order, or composition for our illustration; the principle is obviously the same in all, and in fact applies equally to the production of a house, a statue, or any other complex. {...}

7.

[T]here are different senses of 'coming to be.' In some cases we do not use the expression 'come to be,' but 'come to be so-and-so.' Only substances are said to 'come to be' in the unqualified sense.

Aristotle has been arguing that in any case of change, something must persist – that is, there must be something that undergoes the change. Why is he so sure of this? How would you describe a case where a change happens, but there is nothing numerically identical throughout it?

Assuming this principle – in any change, there must be something that endures through the change – is sound, we need to look at two very different kinds of case. Take the case of not-bald/bald. What is the 'underlying substratum' in this sort of case?

But now consider a substance itself coming to be (i.e., instead of coming-to-be-F, consider coming-to-be period.) There must be a substratum here as well; but it cannot be a substance (since this is not a case of some substance taking on a new property, but coming into existence in the first place.) This is prime matter, matter lacking all form.

1.5 We never experience prime matter; how, then, does Aristotle think we can come to know it? (See the previous paragraph of Aristotle's text)

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Growing availability of relevant OER

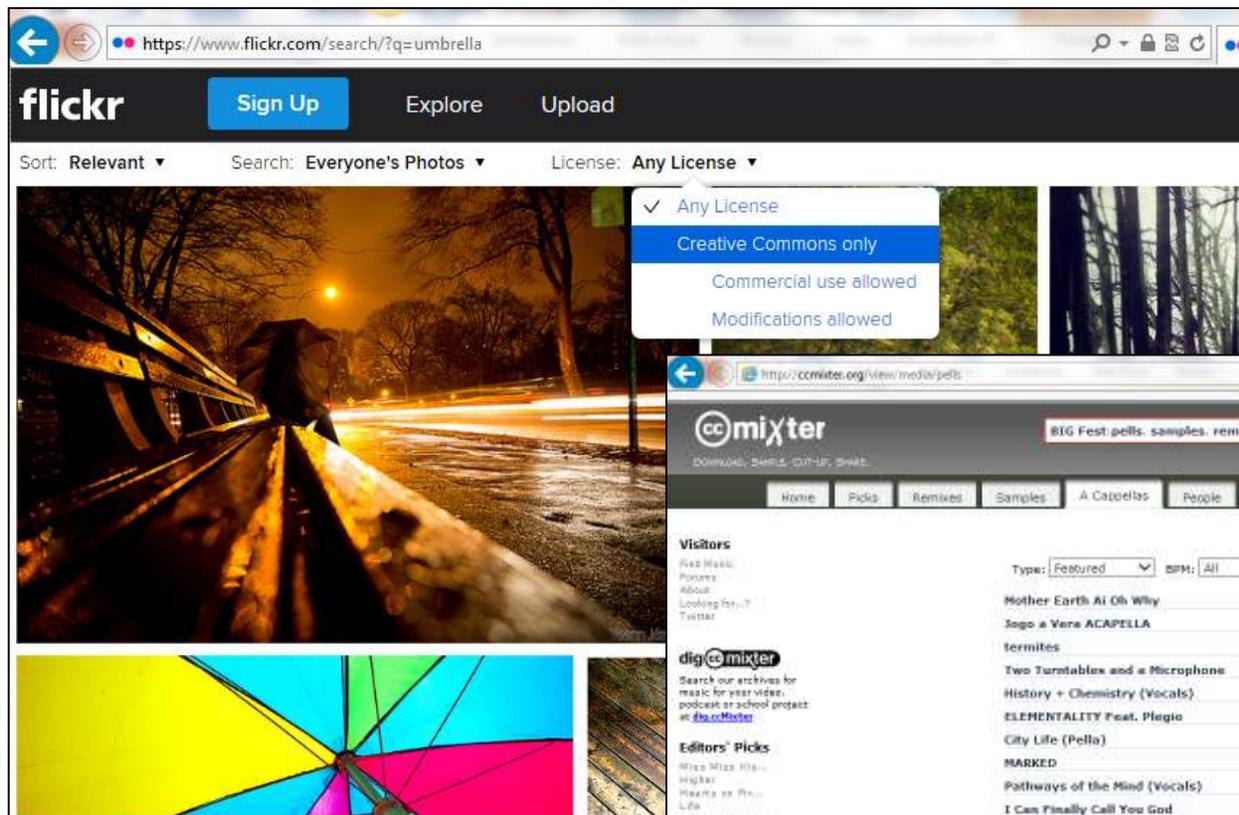
The image shows a promotional display for OpenStax College. At the top left is the OpenStax College logo, which consists of three horizontal bars in green, yellow, and blue, followed by the text "openstax COLLEGE".

The display is divided into several sections:

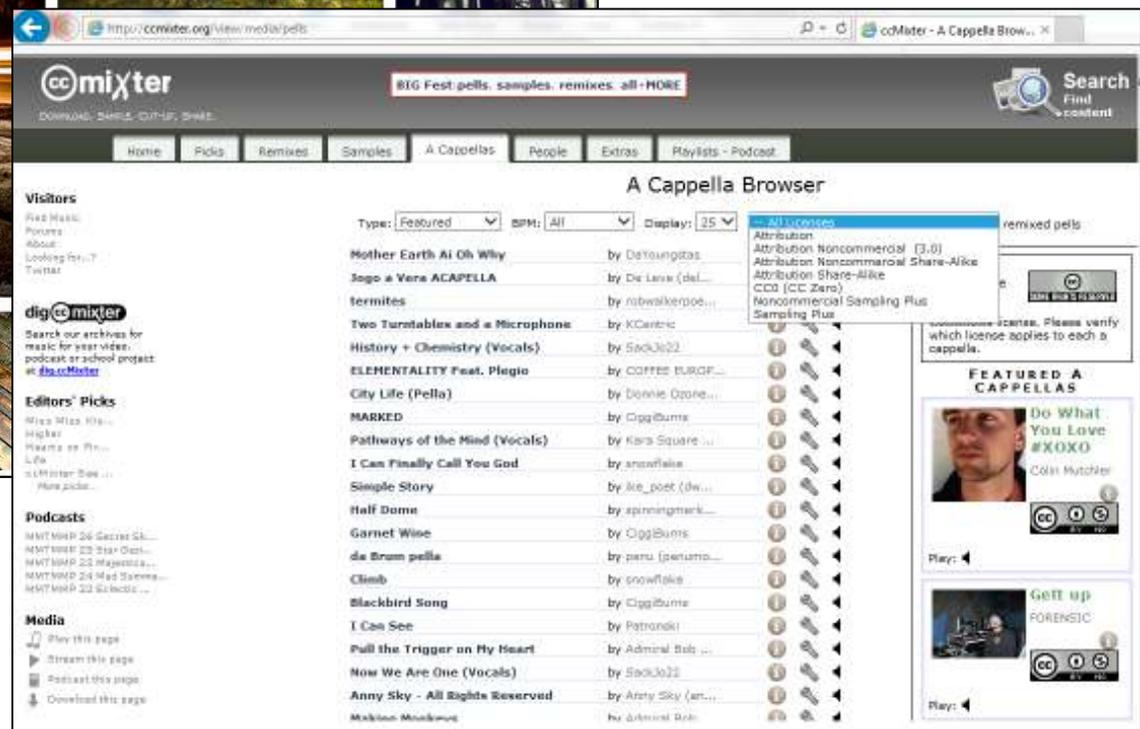
- Top Left:** A sign titled "DO YOU WISH YOUR TEXTBOOKS WERE FREE?" with a "YES!" button and a "NO" button.
- Top Right:** A green panel with three white arrows pointing right, each containing a question and an answer:
 - ARE THE BOOKS REALLY FREE?** YES! There is no catch or obligation, thanks to major philanthropic foundations.
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 - HOW CAN WE USE AN OPENSTAX COLLEGE BOOK IN MY CLASS?** Your professor can make the best decision about what book is the best fit for your class. Take a letter from the right, add your information and then give it to your professor. Your classmates will thank you!
- Bottom Left:** A metal cart with four shelves holding several textbooks. The visible titles are "Biology Concepts Biology", "Sociology", "Micro-economics", "Macro-economics", and "Physic".
- Bottom Right:** A close-up view of two textbooks. One is "Anatomy and Physiology" with a grey cover and orange text. The other is "Introduction to Sociology" with a yellow cover and black text.

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Growing availability of relevant OER



<http://www.flickr.com>



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Growing availability of relevant OER

The screenshot shows the MIT OpenCourseWare website for the course "Introduction to Algorithms". The page features a navigation menu with "Courses" highlighted. The course title is prominently displayed at the top. A sidebar on the left contains a list of course components: COURSE HOME, SYLLABUS, CALENDAR, READINGS, LECTURE VIDEOS, RECITATION VIDEOS, ASSIGNMENTS, EXAMS, RELATED RESOURCES, and DOWNLOAD COURSE MATERIALS. The main content area includes a 3D Rubik's cube graphic with the number "6" and text describing the course's focus on solving the 3x3x3 Rubik's Cube. The instructor information lists Prof. Erik Demaine and Prof. Brinda Deavdas. The MIT Course Number is 6.006, and it is noted as being taught in Fall 2011. The level is identified as Undergraduate. A "CITE THIS COURSE" button is visible. The footer contains various logos, including MIT, Open Education Consortium, and several corporate supporters like Dow, Ab InBev, MathWorks, and Accenture.

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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Introduction to Algorithms

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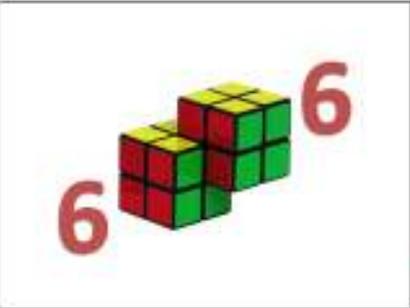
RECITATION VIDEOS

ASSIGNMENTS

EXAMS

RELATED RESOURCES

DOWNLOAD COURSE MATERIALS



In Problem Set 6, students develop algorithms for solving the 3x3x3 Rubik's Cube.

Instructor(s)
Prof. Erik Demaine
Prof. Brinda Deavdas

MIT Course Number
6.006

As Taught In
Fall 2011

Level
Undergraduate

CITE THIS COURSE

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Course Description | **Related Content**

Course Features

- Video lectures
- Exams and solutions
- Assignments
- Recitation

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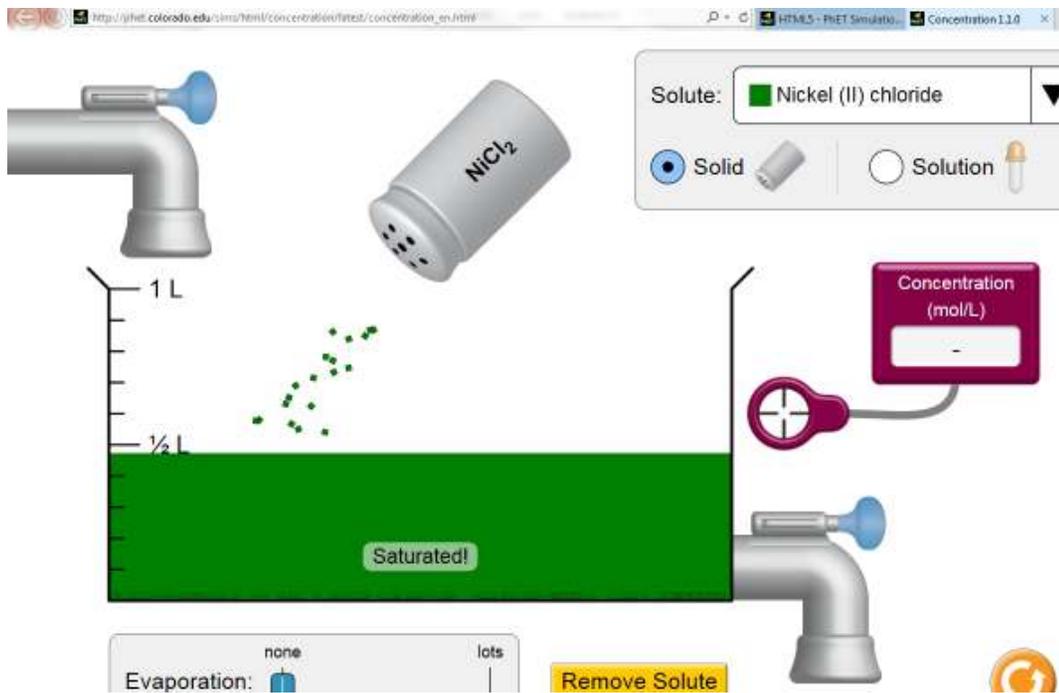
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Growing availability of relevant OER



About PhET > Licensing

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If your use includes redistribution of the simulations, please let us know! This type of information is very useful when writing proposals for future funding.

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- Double Wells and Covalent Bonds Simulation
- Quantum Bound States Simulation, and
- Quantum Tunneling and Wave Packets Simulation

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Growing availability of relevant OER

The image shows two overlapping screenshots from YouTube. The top-left screenshot is a help page titled "Creative Commons" with the following text:

Creative Commons

Creative Commons licenses provide a standard way for content creators to grant someone else permission to use their work. YouTube allows users to mark their videos with a Creative Commons [CC BY license](#). These videos are then accessible to YouTube users for use, even commercially, in their own videos. [Learn about copyright on YouTube](#)

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Who's eligible to use Creative Commons on YouTube

The ability to mark uploaded videos with a Creative Commons license is only available to users with a [standing](#). You may check the status of your account on the [Features](#) page.

The standard YouTube license remains the default setting for all uploads. To

The bottom-right screenshot is a search results page for "yellowstone geysers,creativecommons". The search bar shows the query and the results are filtered by "Creative Commons". The results list several videos:

- Yellowstone geysers & hot springs (part 2)** by jsj1771 - 10 months ago - 1,803 views. Some more modern hydrothermal features (geysers and hot springs) at the Yellowstone Hotspot Volcano in northeastern Wyoming.
- Relaxing 3 Hour Video of Geyser at Yellowstone** by hansende - 1 year ago - 3,881 views. Please SUBSCRIBE by clicking here: http://www.youtube.com/subscription_center?add_user=Hansende Another video you might like...
- Yellowstone geysers & hot springs (part 12) (HD)** by jsj1771 - 3 months ago - 113 views. Some modern hydrothermal features (geysers and hot springs) at the Yellowstone Hotspot Volcano in northwestern Wyoming.
- Yellowstone geysers & hot springs (part 10) (HD)** by jsj1771 - 4 months ago - 135 views. Some modern hydrothermal features (geysers and hot springs) at the Yellowstone Hotspot Volcano in northwestern Wyoming.

Growing availability of relevant OER



<http://www.merlot.org>



<http://guides.lib.vt.edu/OER>



<http://www.jorum.ac.uk>



https://www.google.com/advanced_search (scroll down to “usage rights”)

OER use often requires pedagogical innovation and **adaptation**

Implementing new resources, pedagogies and environments require adaptation.

Where & how of teaching and learning

- Mobile
- Classroom – face to face
- Online
- Flipped/hybrid classes
- Personalized-learning models
- Independent/hobby/supplemental learning
- Assessing student learning



OER use often requires pedagogical innovation and **adaptation**



Adopt, Adapt/ReMix, Create

. . . but always with the need to address pedagogy

Choosing to openly license

- How?

- Human readable logo or text
- Machine readable

https://wiki.creativecommons.org/Marking_Works_Technical

- Where?

Sharing so your work can be found

- Local: [VTechWorks](http://vtechworks.lib.vt.edu/register)
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<http://www.merlot.com> <http://www.oercommons.org>
- Your discipline's sharing networks
- How do you already share?

6 Creative Commons Licenses



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Virginia Tech Libraries

Library Workshop

Exploring Innovative & Open Educational Resources:
Three Current Projects



Join several Virginia Tech and Radford University faculty members as they discuss their current work of developing innovative or open educational resources for use in their teaching. Panel themes will be further explored in the after-panel hands-on workshop. Events begin with a pre-panel multimedia tour of innovative and open educational resources from Virginia Tech, Radford, and beyond.

9:30 am - 10:00 am — Refreshments and Multimedia tour
10:00 am - 11:00 am — Panel Discussion
11:00 am - 12:00 pm — Hands on Collaboration

Panelists:



Dr. Clifford A. Shaffer
Professor of Computer Science
Virginia Tech



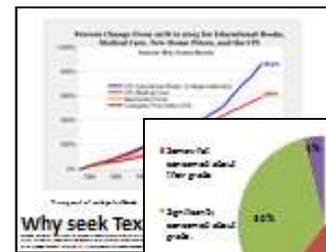
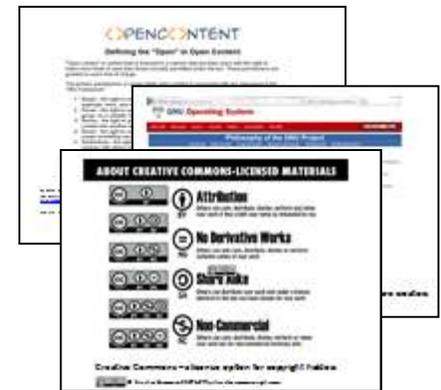
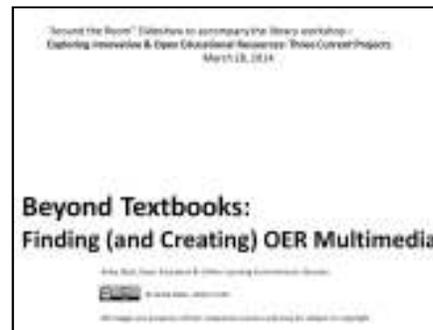
Dr. Benjamin Jantzen
Assistant Professor of Philosophy
Virginia Tech



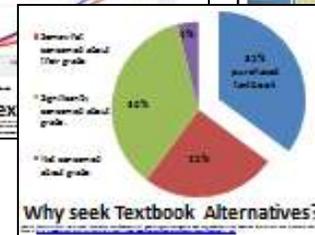
Dr. Bruce Mahin
Professor of Composition and Music Theory
Radford University

Friday, March 28 • 9:30 am - 12 noon • 1st Floor Multipurpose Room
RSVP: Anita Walz arwalz@vt.edu by March 25th

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Virginia Tech Libraries

The screenshot shows the Virginia Tech University Libraries website. The header includes the Virginia Tech logo and the text "University Libraries". Below the header, there is a navigation menu with "Library", "LibGuides", "Open Educational Resources", and "OER Overview". The main content area is titled "Open Educational Resources: OER Overview" and includes a brief description: "A 'getting started' guide overviewing open, editable, and lower-cost textbooks and open teaching & learning resources for faculty, students, and librarians." A prominent "Off Campus Sign In" button is visible on the right. Below the main content, there are three columns: "Currently featured items" featuring "Mouse Party (Interactive) Genetics and the Brain" and "Introductory Statistics by Barbara Illowsky; Susan Dean"; "Gateways & Portals" listing various OER resources like MERLOT, OER Commons, and Creative Commons; and "OER Librarian" featuring a photo of Anita Walt and an "Email Me" button. At the bottom, there is an "About OER" section and an "EDUCAUSE Resources" section with a link to "7 Things You Should Know".

http://guides.lib.vt.edu/OER

DER Overview - Open Educ...

Library web Season

VirginiaTech University Libraries
Invent the Future

Library LibGuides Open Educational Resources OER Overview

Open Educational Resources: OER Overview

A "getting started" guide overviewing open, editable, and lower-cost textbooks and open teaching & learning resources for faculty, students, and librarians.

Off Campus Sign In

OER Overview Textbooks

Currently featured items

- **Mouse Party (Interactive)**
Genetics and the Brain

Introductory Statistics by Barbara Illowsky; Susan Dean

ISBN: 1939168208
Publication Date: 2017-10-31

- **Other OpenStaxCollege open textbooks**

About OER

VIDEO: Why Open Education Matters (2:27)
Definition: Open Educational

Gateways & Portals

- DER audio, video, images, simulations, textbooks, courseware . . .
- Find OER | Open Professionals Education Network (OPEN)
- MERLOT - Search multiple repositories
- OER Commons
- Creative Commons
- Google Advanced Search (filter usage rights)
- Open Course Library (SBOTC)
- OER Africa
- Wikieducator Exemplary Collection of Open Learning Content Repositories
- OER - CC Wiki
- The Orange Grove: Florida's Digital Repository
- Affordable Learning Georgia
- Affordable Learning Solutions Oklahoma
- Affordable Learning Solutions California State University
- Open Courseware Directory

OER Librarian

Anita Walt

Email Me

Contact:
NEED HELP? Contact me!
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Tel: 540-231-2204
Economics & Mathematics Liaison
Assessment, Open Education and Online Learning Environments Librarian

EDUCAUSE Resources

- **7 Things You Should Know**

Explorer Inquiry Tools

- Instructional Designers & New Media Faculty
- Literature and web searching
- Classes and faculty discussion groups
- Faculty survey (pilot)
- Library colleagues
- Cold calls



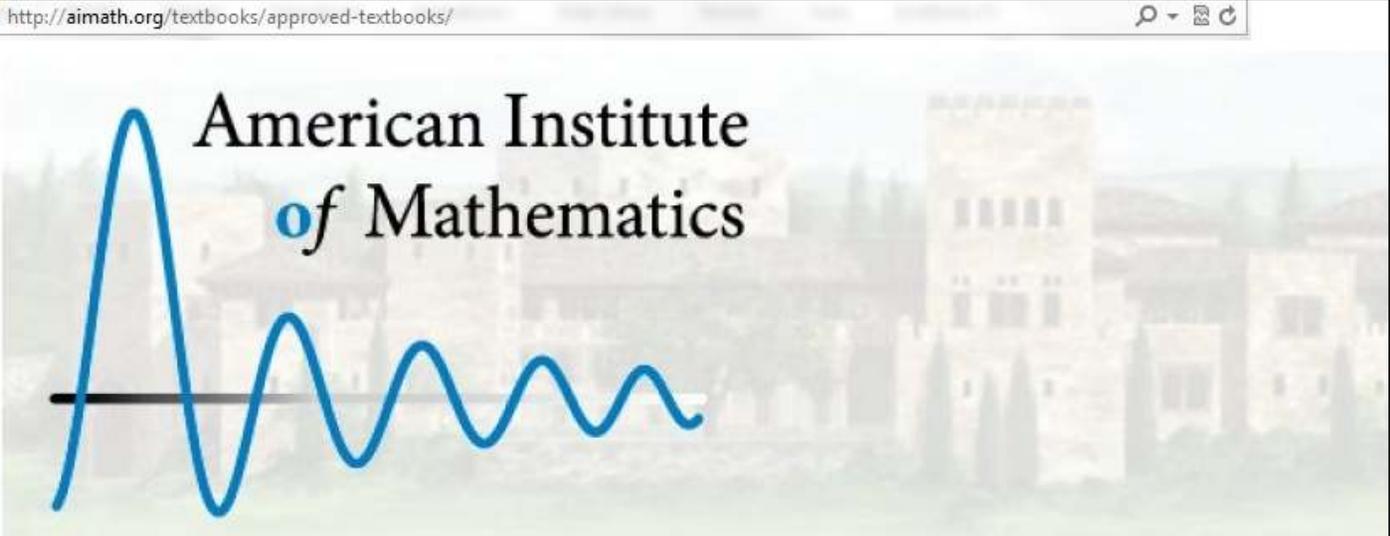
Virginia Tech Libraries

Collaboration

- Copyright instruction and consultation
- Faculty IT hosting needs
- OER development planning collaboration
- Student engagement
 - Student Advisory Board
 - Student Government
- Modeling open licensing
- Textbook adoption workshop
- Collaboration with instructional designers
- Exploring open publishing initiatives



Open
textbooks
adopted!!



Programs ▾ Projects ▾ Library ▾ Visitors ▾

[Approved Textbooks](#) • [Evaluation Criteria](#) • [Guide for Authors](#) •

Approved Textbooks

The following open-source or open-access textbooks have been j

Liberal Arts Math

Math in Society
David Lippman

Precalculus

Precalculus
David H. Collingwood, K. David Prince, Matthew M. Conroy

Precalculus / College Algebra / Trigonometry
Carl Stitz and Jeff Zeager

Calculus

Calculus

http://openstaxcollege.org/textbooks/introduction-to-sociology

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INTRODUCTION TO SOCIOLOGY

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Introduction to
Sociology

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3.3. Insertion Sort

What would you do if you have a stack of phone bills from the past two years and you want to order by date? A fairly natural way to handle this is to look at the first two bills and put them in order. Then take the third bill and put it into the right position with respect to the first two, and so on. As you take each bill, you would add it to the sorted pile that you have already made. This simple approach is the inspiration for our first sorting algorithm, called *Insertion Sort*.

Insertion Sort iterates through a list of records. For each iteration, the current record is inserted in turn at the correct position within a sorted list composed of those records already processed. Here is an implementation. The input is an array named *A* that stores *n* records.

```
void insort(Comparable[] A) {  
    for (int i=1; i<A.length; i++) // Insert i'th record  
        for (int j=i; (j>0) && (A[j].compareTo(A[j-1]) < 0); j--)  
            swap(A, j, j-1);  
}
```

(Note that to make the explanation for these sorting algorithms as simple as possible, we will usually assume that our input is an integer array rather than an array of more complex records. But you should realize that in practice, there is not usually much use to sorting an array of simple integers. Nearly always we want to sort more complex records that each have an integer *key* value. Module 5.6 discusses ways to associate a key value with a record.)

Here is the start to the Insertion Sort process.

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Insertion Sort starts with the record in position 1

20	10	15	54	55	11	78	14
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Format of 2 variable Kmaps

A kmap has 2^v squares where v is the number of variables. For a 2 variable kmap, there are 4 squares. The squares are labeled as shown to the left.

Each square (entry) in the kmap corresponds to one row in the truth table for the function F.

The rows of the truth table are highlighted the same color as the corresponding box in the kmap. Notice how the labeling of the rows (A variable) and the columns (B variable) in the kmap correlate to the truth table.

AB	Minterms
00	A'B'
01	A'B
10	AB'
11	AB

Open Access interactive learning modules.

Introduction to Computer Engineering Learning Support Materials / Joe Tront



Virginia Tech Libraries

<http://blogs.lib.vt.edu/openvt/2014/09/03/open-textbooks-available-for-review/>

– THE TECHNICAL MOOC: AN INTERVIEW WITH TOM SANCHEZ – STUDENTS: APPLY FOR OPENCOM 2014 SCHOLARSHIPS! –

Open Textbooks Available for Review

by PHILIP YOUNG posted on SEPTEMBER 3, 2014

The University Libraries invites students and faculty to peruse a collection of open textbooks on display next to the reference desk on the second floor of Newman Library. Traditional textbooks tend to be very expensive, but open textbooks such as these from [OpenStax College](#) have several free online formats (the iBooks are \$4.99) and are much cheaper in hardback form (the cost of printing, usually \$30-\$50). Students interested in reducing textbook costs can take pre-printed information from the display to give to their professors. More information is available in the [OpenStax College Textbook Display FAQ](#). Our hard copy display should be around for a few weeks, or you can explore the books on the [OpenStax website](#).



<http://www.cnn.com/interactive/2014/09/03/living/cnn10-hacking-college/>

THE CNN 10: HACKING COLLEGE

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HACK BOOK COSTS WITH OPEN SOURCE TEXTS

Save money with open-source textbooks

— 9 of 11 —

By Emanuella Grinberg, CNN

It's hardly a secret that the price of new college textbooks has risen 82% in the last decade, forcing students to find cheaper alternatives or forego course materials altogether.

Rentals, buybacks and used textbooks are part of the solution, but they still

THE PROBLEM
College textbooks are ridiculously expensive

THE SOLUTION

What other libraries are doing

- **Incentivizing** \$ OER adoption and authoring
- **Instructional design** / course redesign (Integrating OER and subscribed library resources)
- Curating local and subject **collections of OER**
- **Open textbook development** & publishing

UMassAmherst

 TEMPLE
UNIVERSITY®

 Open
Textbook
Library

 UNIVERSITY LIBRARIES
The UNIVERSITY of OKLAHOMA

OPEN SUNY
Textbooks

OER Support by & for Librarians

SPARC Libraries & OER Forum

<http://www.sparc.arl.org/resource/sparc-libraries-oer-forum>

- Monthly topical teleconference
- Listserv

Blended Librarian Community

<https://www.facebook.com/BlendedLibrarians>

<http://www.scoop.it/t/blended-librarianship>

- Free webcasts/webinars

Community College Consortium for Open Educational Resources

<https://groups.google.com/forum/#!forum/cccoer-advisory>

- Focused on Community Colleges
- Monthly webinars
- Listserv



Libraries are . . .

- Intellectually curious information problem solvers
- Concerned about **information access** issues
- Have **trusted relationships** with faculty
- **Expert searchers** with **subject expertise**
- Hubs for teaching, pedagogy & instructional design
- **Repository infrastructure** experts (for access, retrieval, retention)
- **Copyright** knowledgeable
- Curators (identify, evaluate, and **curate collections**)
- **Already engaged** in open initiatives



Current Challenges at VT

- Find, learn from, and support faculty OER champions
- Make it *easier* for faculty to find, adapt & use openly licensed resources (possibly incentivize)
- Identify and integrate support into faculty workflows
- Encourage student engagement
- Measuring our impact

Idea? Virginia OER library working group?



For example: BC OER Librarians

<http://bcoerguides.wikispaces.com>

<http://open.bccampus.ca/2014/05/20/one-heck-of-a-hackfest-id-say>

Suggested Reading

- The roles of libraries and information professionals in Open Educational Resources (OER) initiatives (JISC CETIS) August 2012 <http://publications.cetis.ac.uk/wp-content/uploads/2012/08/OER-Libraries-Survey-Report.pdf>
- Environmental Scan and Assessment of OERs, MOOCs and Libraries: What Effectiveness and Sustainability Means for Libraries' Impact on Open Education
<http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/Environmental%20Scan%20and%20Assessment.pdf>

Thanks for your time!

Anita Walz

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