Non-traditional Communication Assignments

Writing Across the Curriculum+ Program
February 21, 2017

Workshop Outline

- Introductions
- What communication skills do students need?
- Non-traditional communication assignments
- UBC resources
- Summary, educator resources, workshop survey

Workshop Objectives

By the end of today's workshop you will be able to:

1. Identify a variety of non-traditional communication assignments that have been used in science courses and discuss benefits and challenges for each;

2. Plan how you might apply non-traditional communication assignments into your course(s), including how you would assess them; and

3. Recognize resources at UBC for the implementation of such assignments.

Teaching communication skills in the university classroom

Using the table provided, brainstorm on the following statements:

Keeping in mind the wide variety of paths that a science student can take both during their degree and after, list some communication activities that you could see them doing.

How are you currently teaching the skills required for these activities?

Be prepared to share with the larger group.

Non-traditional communication assignments

- Press releases
- Blogs and other social media
- Wikis
- Videos and podcasts

Press releases

A short (e.g. 300-500 words) written piece providing journalists with basic information about a piece of news (e.g. research at UBC).

Science for sweet tooths

Email Tweet Share 103

Media Release | November 29, 2016

UBC's Xiaonan Lu and Yaxi Hu are testing antioxidant levels in raw cocoa beans to chocolate bars. Photo: Martin Dee

UBC researchers develop new method to test for antioxidants in chocolate

Food scientists at the University of British Columbia have developed a faster and cheaper way to quantify antioxidant levels in chocolate. It's a method they plan to use in new research to help uncover when antioxidant levels rise and fall during the manufacturing process, from raw cocoa beans to chocolate bars.

Source: UBC News Website - http://news.ubc.ca/2016/11/29/science-for-sweet-tooths/

Press releases - Benefits

- Allows students to practice with an authentic assignment for science communication
  - Helps students think about science in the news
- Develops skills for writing to a non-specialist audience
  - Helps students to translate science into jargon-free language
  - Exposes students to science communication
- Introduces a different format and style than typical science writing
  - Emphasizes concise writing
  - Provides practice summarizing information and focusing on the main points
  - Demonstrates student comprehension of complex subjects

Press releases – Example Assignments

- Experiment, scientific article and one-page press release (Materials Science, Widstrand *et al.* 2001)
  - Writing reviewed by peers and by writing fellows hired for the class

- Press release for a scientific article (Biology, Robin Young BIOL200, UBC ScWRL Website)
  - Changed from writing a scientific essay; students participate in a science writing workshop

- Starting with a news article (Astronomy, ASTRO322 University of Alberta)
  - Students choose an astronomy media story, find the original article, summarize and write a press release

Press releases – Assignment Tips

- Train students to write in this format and style
  - E.g. workshop on difference in language between press release and scientific article; jargon activity
  - Provide example press releases
- Allow for practice to help students balance the science content and language
- Help students focus on the important content for a press release and build their story
  - E.g. 3 question worksheet (Kross); inverted pyramid style
- Support students in reading the scientific articles
  - E.g. how are they structured, how to identify information to use, how to reference

Press releases - Assessment

- Criteria to consider in the assessment:
  - Scientific content
  - Organization/structure
  - Grammar/mechanics of writing
  - Style (e.g. written in journalistic style)
  - Headline (e.g. catchy, positive and specific)
  - Lead (e.g. draws in reader, 1-3 sentences max)
  - News value (e.g. clear why it was written)

–Headline (e.g. catchy, positive and specific)

–Lead (e.g. draws in reader, 1-3 sentences max)

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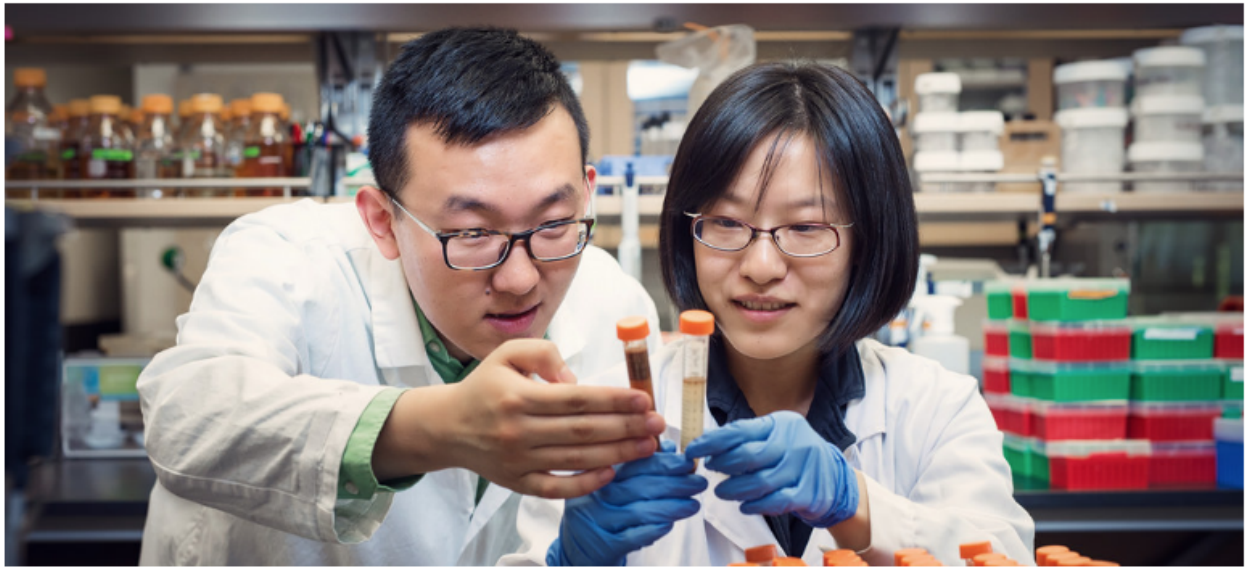

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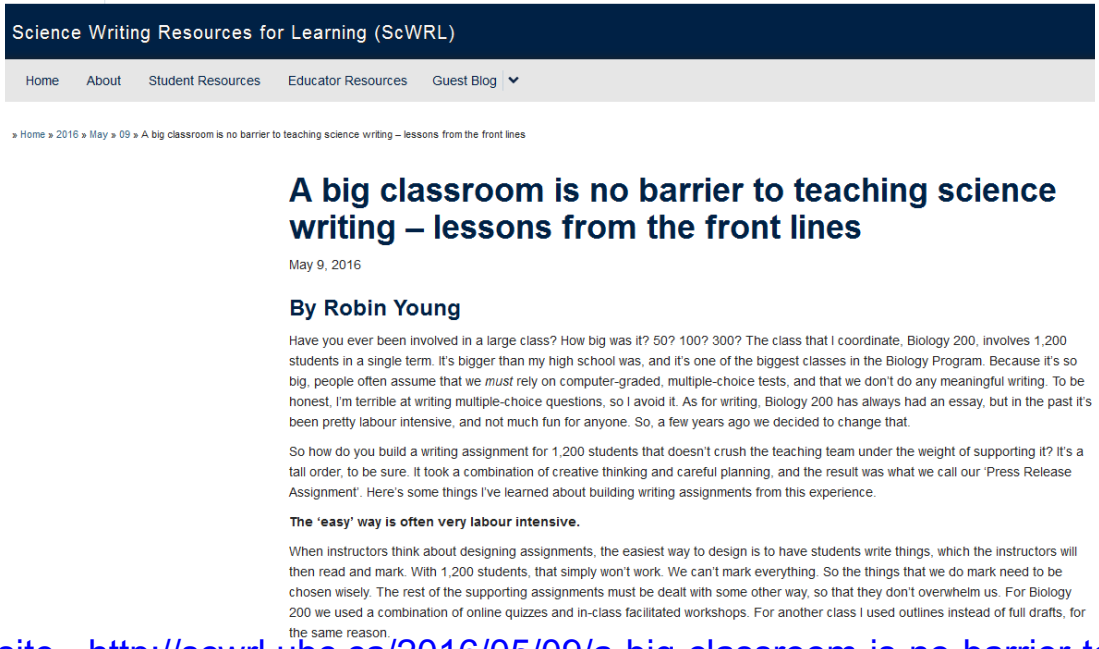
Blogs and other social media

Blog: A website containing entries written in an informal, conversational style. Entries may be on a topic or set of topics and may contain text, images, data, and videos.



Science Writing Resources for Learning (ScWRL)

Home About Student Resources Educator Resources Guest Blog

» Home » 2016 » May » 09 » A big classroom is no barrier to teaching science writing – lessons from the front lines

A big classroom is no barrier to teaching science writing – lessons from the front lines

May 9, 2016

By Robin Young

Have you ever been involved in a large class? How big was it? 50? 100? 300? The class that I coordinate, Biology 200, involves 1,200 students in a single term. It's bigger than my high school was, and it's one of the biggest classes in the Biology Program. Because it's so big, people often assume that we *must* rely on computer-graded, multiple-choice tests, and that we don't do any meaningful writing. To be honest, I'm terrible at writing multiple-choice questions, so I avoid it. As for writing, Biology 200 has always had an essay, but in the past it's been pretty labour intensive, and not much fun for anyone. So, a few years ago we decided to change that.

So how do you build a writing assignment for 1,200 students that doesn't crush the teaching team under the weight of supporting it? It's a tall order, to be sure. It took a combination of creative thinking and careful planning, and the result was what we call our 'Press Release Assignment'. Here's some things I've learned about building writing assignments from this experience.

The 'easy' way is often very labour intensive.

When instructors think about designing assignments, the easiest way to design is to have students write things, which the instructors will then read and mark. With 1,200 students, that simply won't work. We can't mark everything. So the things that we do mark need to be chosen wisely. The rest of the supporting assignments must be dealt with some other way, so that they don't overwhelm us. For Biology 200 we used a combination of online quizzes and in-class facilitated workshops. For another class I used outlines instead of full drafts, for the same reason.

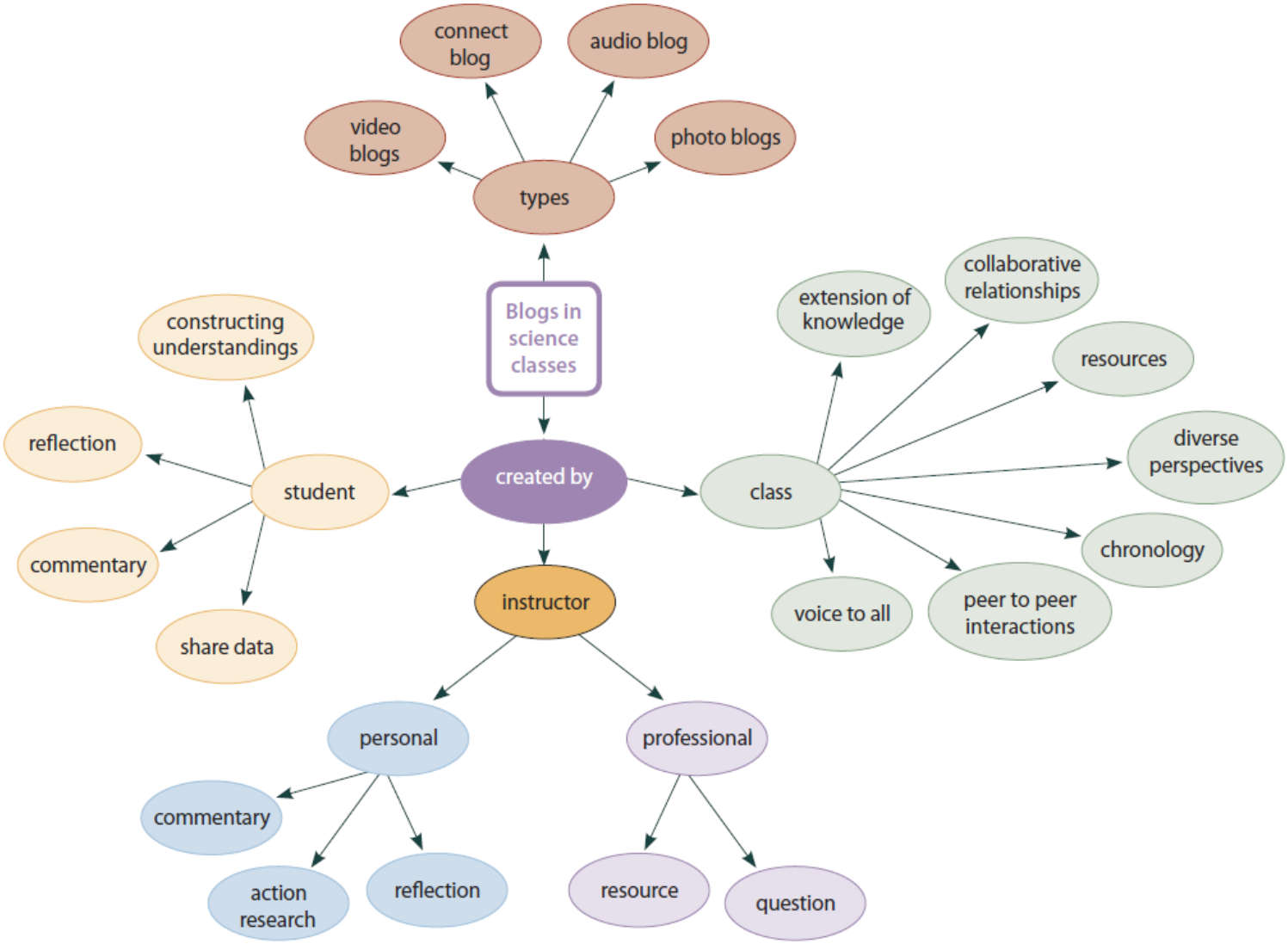
Source: ScWRL Website - http://scwrl.ubc.ca/2016/05/09/a-big-classroom-is-no-barrier-to-teaching-science-writing-lessons-from-the-front-lines/

Blogs and other social media - Benefits

- Develops skills for writing online for non-specialists
- Introduces a different format and style
  - Conveying science topics in a conversation
  - Writing in a more personal and informal style, need to engage the reader
  - Online is more dynamic, can include hyperlinks to content
  - Opportunity to include other media (e.g. photos, video clips, etc.)
  - Can be low-stakes writing (e.g. reflective writing, journal)
- Allows for direct interaction with audience
  - E.g With peers, can increase student engagement if have responsibility to read and comment
  - May encourage students uncomfortable speaking in class
  - Can increase student interest and ownership for learning

Blogs and other social media – Example Assignments

- Communicating controversial science (Science communication, Leach, University of Queensland)
  - -Blog entries commented on a variety of issues related to a scientific controversy, used as a tool for thinking and analysis for essay and presentation



Taken from Brownstein and Klein (2006)

Blogs and other social media – Example Assignments

- Critiquing statistics in news articles on Twitter (graduate school introductory statistics, Everson *et al.* 2013)
  - 10 posts of links to different news articles, link to course content and critique
  - e.g. IQ and exercise. A huge sample size of 1.2 million, but no women in the sample! http://bit.ly/6B55g1 #epsy5261.
- Sharing field observations on Twitter (Ornithology course, Margaret Rubega, University of Connecticut)
  - Tweet at least 5 times about observations of bird behaviour, include location information and relate to course content (#birdclass)

Blogs and other social media – Assignment Tips

- Determine the purpose of the assignment and stick to it
  - Learning or interacting, argument or commentary or community
  - Establish relevance for students and recommend blogs or Twitter feeds to follow

- Train students to write in this format and style
  - Discuss what makes good blog entries
  - Highlight examples of good blogs
  - How to use to hyperlinks in their blog and distinguish the quality (e.g. peer-reviewed literature vs. other bloggers)

- Scaffold learning and allow for practice to help students build their skills
  - Try focusing on particular elements in different blogs (e.g. writing style, then visual aids, etc.,)

Blogs and other social media – Assignment Tips

- Monitor posts and participate in discussions
  - Ensure polite behavior and prevent bullying
  - Make sure students know the policy on what is acceptable

- Be aware of issues of privacy and safety with the use of public sites
  - Give students the opportunity to speak to you privately about concerns and provide an alternative assignment
  - Encourage use of pseudonyms and avoid posting private information

- Do not assume that students are tech savvy
  - Have conversations/training about online privacy (e.g. UBC Digital Tattoo Project)
  - E.g. privacy settings on Facebook for posting with a hidden profile

Blogs and other social media - Assessment

- Criteria to consider in the assessment:
  - Opinion/argument within the post
  - Text layout and use of graphics (e.g. images/audio/video)
  - Hyperlinks
  - Appropriate referencing/attribution
  - Tags
  - Comments/discussion

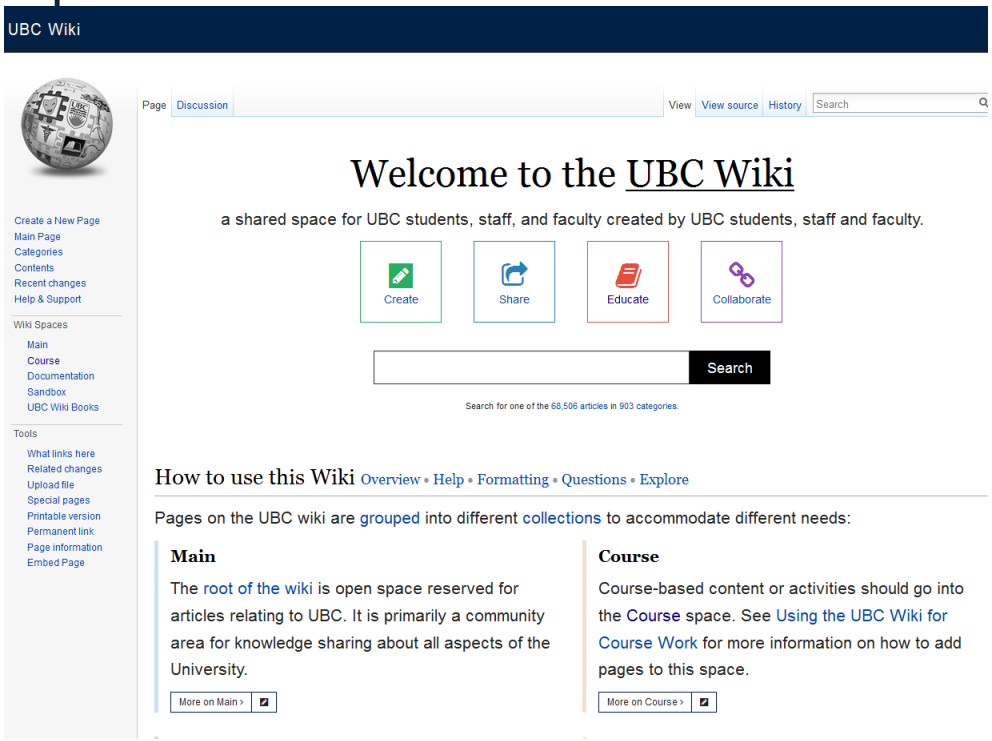
Rating	Characteristics
4	*Exceptional.* The blog post is focused and coherently integrates examples with explanations or analysis. The post demonstrates awareness of its own limitations or implications, and it considers multiple perspectives when appropriate. The entry reflects in-depth engagement with the topic.
3	*Satisfactory.* The blog post is reasonably focused, and explanations or analysis are mostly based on examples or other evidence. Fewer connections are made between ideas, and though new insights are offered, they are not fully developed. The post reflects moderate engagement with the topic.
2	*Underdeveloped.* The blog post is mostly description or summary, without consideration of alternative perspectives, and few connections are made between ideas. The post reflects passing engagement with the topic.
1	*Limited.* The blog post is unfocused, or simply rehashes previous comments, and displays no evidence of student engagement with the topic.
0	*No Credit.* The blog post is missing or consists of one or two disconnected sentences.

Source: ProfHacker Blog

http://www.chronicle.com/blogs/profhacker/a-rubric-for-evaluating-student-blogs/27196

Wikis

A website whose content and structure can be edited by multiple people.



Source: UBC Wiki - http://wiki.ubc.ca/

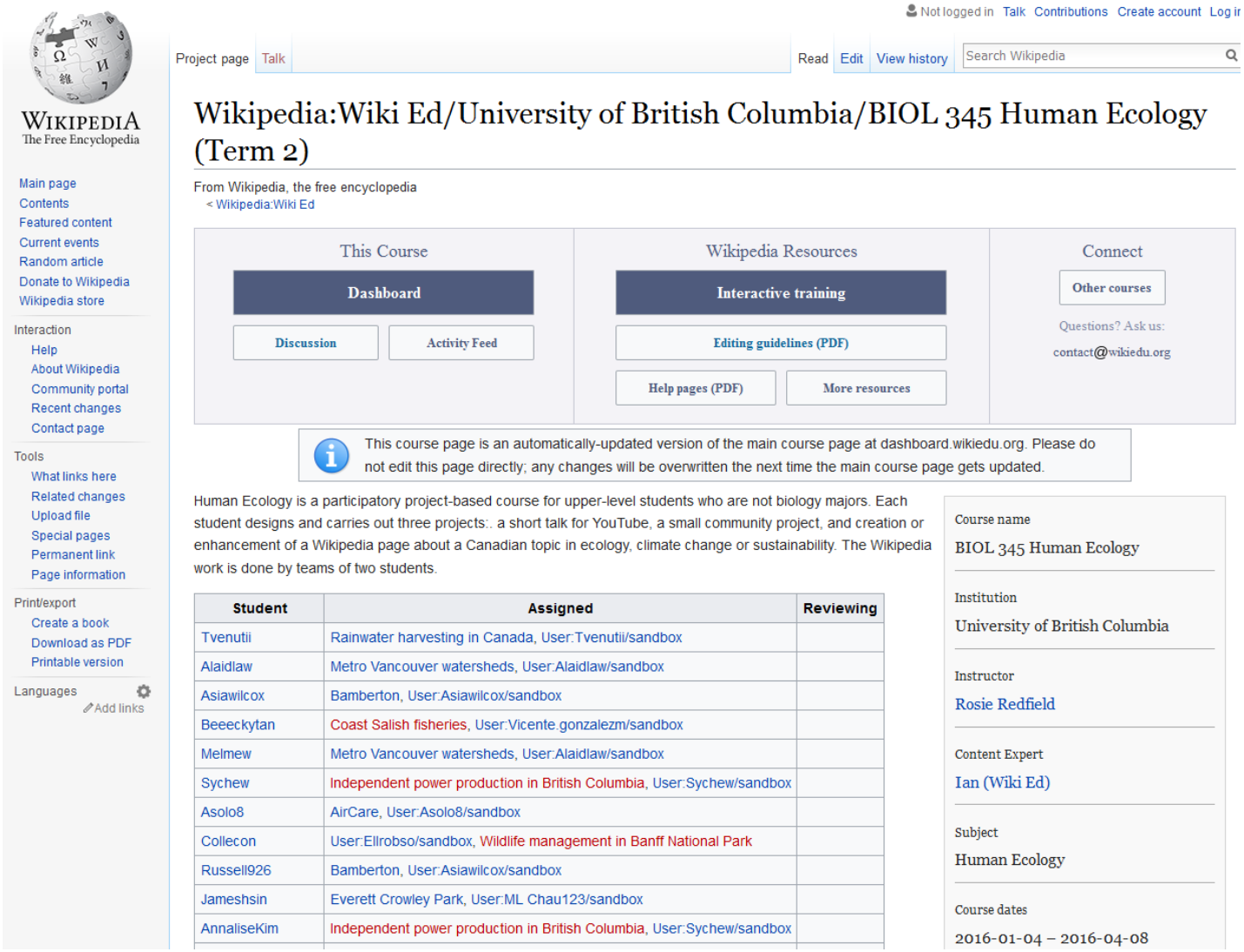
Wikis - Benefits

- Authentic experience in contributing to online knowledge-building (if using Wikipedia)
  - Contribution is accessible by the online community
  - Receive feedback on their work from other editors
  - Collaborate with a community of editors
- Introduces a different format and style for a non-specialist audience
  - Writing from a neutral point of view
  - Formal tone and plain language
  - Demonstrates student comprehension of complex subjects
- Encourages students to critically analyze online information and reflect on the sources
  - Students think critically about what they put online

Wikis – Example Assignments

- Wikipedia assignments can take a variety of forms
  - Write an article or make significant edits
  - Copy-edit an article
  - Add images to an article
  - Search for information gaps in an article
  - Add citations to an article
  - Contribute to UBC Wiki
    - Source: Wiki Education Foundation - http://tinyurl.com/zb622r3

- Contribute or enhance a Wikipedia page on a Canadian topic in ecology, climate change or sustainability (Biology, Rosie Redfield BIOL345 UBC)



Not logged in Talk Contributions Create account Log in

Project page Talk | Read Edit View history | Search Wikipedia

WIKIPEDIA
The Free Encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

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Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools
What links here
Related changes
Upload file
Special pages
Permanent link
Page information

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Languages
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Wikipedia:Wiki Ed/University of British Columbia/BIOL 345 Human Ecology (Term 2)

From Wikipedia, the free encyclopedia
< Wikipedia:Wiki Ed

This Course
Dashboard
Discussion
Activity Feed

Wikipedia Resources
Interactive training
Editing guidelines (PDF)
Help pages (PDF)
More resources

Connect
Other courses
Questions? Ask us:
contact@wikiedu.org

This course page is an automatically-updated version of the main course page at dashboard.wikiedu.org. Please do not edit this page directly; any changes will be overwritten the next time the main course page gets updated.

Human Ecology is a participatory project-based course for upper-level students who are not biology majors. Each student designs and carries out three projects:. a short talk for YouTube, a small community project, and creation or enhancement of a Wikipedia page about a Canadian topic in ecology, climate change or sustainability. The Wikipedia work is done by teams of two students.

Student	Assigned	Reviewing
Tvenutii	Rainwater harvesting in Canada, User:Tvenutii/sandbox	
Alaidlaw	Metro Vancouver watersheds, User:Alaidlaw/sandbox	
Asiawilcox	Bamberton, User:Asiawilcox/sandbox	
Beeeckytan	Coast Salish fisheries, User:Vicente.gonzalezm/sandbox	
Melmew	Metro Vancouver watersheds, User:Alaidlaw/sandbox	
Sychew	Independent power production in British Columbia, User:Sychew/sandbox	
Asolo8	AirCare, User:Asolo8/sandbox	
Collecon	User:Ellrobso/sandbox, Wildlife management in Banff National Park	
Russell926	Bamberton, User:Asiawilcox/sandbox	
Jameshsin	Everett Crowley Park, User:ML Chau123/sandbox	
AnnaliseKim	Independent power production in British Columbia, User:Sychew/sandbox	

Course name
BIOL 345 Human Ecology

Institution
University of British Columbia

Instructor
Rosie Redfield

Content Expert
Ian (Wiki Ed)

Subject
Human Ecology

Course dates
2016-01-04 – 2016-04-08

Source: [Redfield BIOL345 Wiki](https://en.wikipedia.org/wiki/Wikipedia:Wiki_Ed/University_of_British_Columbia/BIOL_345_Human_Ecology_(Term_2))

https://en.wikipedia.org/wiki/Wikipedia:Wiki_Ed/University_of_British_Columbia/BIOL_345_Human_Ecology_(Term_2)

Wikis – Assignment Tips

- Consider where you will build the content
  - Contribute outside UBC (Wikipedia or WikiEdu)
  - Have a complex assignment, want to track student progress, use a template (WikiEdu)
  - More protected space, e.g. students writing about original research (UBC Wiki)

- Assist students to select appropriate articles or topics
  - Choose a topic that is well-established (not rated "start" or "stub" class on Wikipedia)
  - Students can review peers' work on Wikipedia and leave reviews online or offline

- Introduce students to Wikipedia (or Wikis), including appropriate behavior as part of a community of collaborating editors

Wikis - Assessment

- Criteria to consider in the assessment
  - Peer reviews and collaborations with peers
  - Quality of main contributions
  - Organization
  - Text layout
  - Hyperlinks
  - Graphics and multimedia
  - Citations

Videos and podcasts

Digital audio and video files made available online.

Science 300 Outreach Project - Novel Discoveries in Nuclear Physics

Source: YouTube Website - https://www.youtube.com/watch?v=R8Y4HlbWprA

Videos and podcasts - Benefits

- Allows students to practice with an authentic assignment for science communication

- Develops multiple communication skills
  - Writing for scripts, possibly conducting interviews
  - Oral communication (podcasts)
  - Visual and communication in multiple medias (video)
  - Analyze an audience and tailor communication

- Can be used as a peer-teaching tool
  - Extend class content to bigger picture
  - Students need to demonstrate understanding of complex subjects
  - Increases understanding of some concepts and exam performance (Pegrum *et al.* 2015)

Videos and podcasts - Benefits

- Students are motivated by creating a novel and interesting product
  - Allows for creativity

Videos and podcasts – Example Assignments

- Video documentary assignment (Biology, Kuchel *et al.* 2014)
  - Groups produce 4-5 min video on an environmental issue, emphasis on biological content

- Podcast on core chemistry concepts (Chemistry, Bartle *et al.* 2010)
  - 3 min podcast on acids/bases or oxidation/reduction, loaded on class WebCT site, minor assignment

- Share projects or learning from the course (Psychology, Rawn PSYC 208; Capstone Design Projects, Engineering)
  - One option for groups of students to share with peers what they discovered or accomplished during the term

Science 300 Outreach Project - Novel Discoveries in Nuclear Physics

Source: YouTube Website - https://www.youtube.com/watch?v=R8Y4HlbWprA

Videos and podcasts – Assignment Tips

- Provide technical training and ongoing support
  - Create your own first
  - Keep tools simple and inexpensive (e.g. campus tools)
  - Consider a live demo in class
  - Consider hiring help or accessing support on campus
- Consider privacy and copyright issues
  - Make sure students understand which material they should and shouldn't use (Fair Use Guidelines)

Videos and podcasts - Assessment

- Consider if you will grade production value (e.g. reading a paper versus interspersing music) and which elements are important (e.g. sound audible and clear)

- Criteria to consider in the assessment:
  - Storyboard or script
  - Content/organization (e.g. relevance, clarity)
  - Structure/flow
  - Effective use of language
  - Voice and audience
  - Technical competence (e.g. lighting, sound quality, music, colour, visual composition, camera motion, editing, graphics)

UBC Resources

- Blogs

  -UBC Blogs Support Website https://blogs.ubc.ca/support/

  -UBC Wiki Create a UBC Blogs Course Blog http://wiki.ubc.ca/Documentation:Connect/Create_a_UBC_Blogs_Course_Blog_(How_to)

- Wikis

  -UBC Wiki Using the UBC Wiki for Course Work http://wiki.ubc.ca/Help:Using_the_UBC_Wiki_for_Course_Work

  -UBC Wiki CTLT Teaching With Wikipedia http://wiki.ubc.ca/Documentation:Teaching_With_Wikipedia

- Media

  -DIY Media http://diy.open.ubc.ca/ (e.g Podcasting Basics - http://diy.open.ubc.ca/audio/create-it/podcasting-basics/)

UBC Resources

- Media

  -Learning Technology Hub Tool Guides
  http://lthub.ubc.ca/guides/

  -Learning Technology Support http://lthub.ubc.ca/support/

- Copyright at UBC - http://copyright.ubc.ca/

- Student Privacy

  -UBC Wiki Student Privacy and Consent Guidelines
  http://wiki.ubc.ca/Documentation:Student_Privacy_and_Consent_Guidelines/Instructor_Use

  -UBC Digital Tattoo Project
  http://digitaltattoo.ubc.ca/abouttheproject

UBC Digital Tattoo Project

•Partnership between UBC Library, Irving K. Barber Learning Centre, Centre for Teaching, Learning and Technology, and U of T Faculty of Information and U of T Libraries.

•Project is based on connecting UBC community members to collaboratively explore what it means to be a digital citizen in the ever-shifting online environment

•Site includes resources for students like “Cultivating your online profile”, “Who owns your data?”

•#thinkb4U campaign this winter about allowing apps to access personal data and the implications

WAC+ Program Services

- Workshops
  - Teaching Succinct and Accurate Science Writing (**Feb. 22**)
  - Strategies for Student Success with Writing (**Feb. 23**)
  - Writing Assignment and Assessment Design
  - Providing Effective Feedback on Writing Assignments
  - Teaching Oral Communication in Science
- One-on-one consultations
- TA Training
- Class visits to discuss writing assignments

Contact the WAC+ Program

Email: wac.coordinator@ubc.ca

Website: http://scwrl.ubc.ca/wac

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3. Recognize resources at UBC for the implementation of such assignments.

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a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA