Course Description

We live in an increasingly complex, fast-paced, and volatile world. The stakes have never been higher, and it is no longer sufficient for scientists to throw information into the world and hope that someone is able to understand and apply it. Indeed, it is now clear that scientists have a moral obligation to spend as much time, thought, and effort in the communication of their knowledge as they do in the generation of the knowledge itself. If scientific voices are to be heard above the din, and, more importantly, used for personal, public, and political decision-making, then efficient and effective communication is essential. However, science communication, and particularly the communication of risk in the scientific context, is difficult to do well, particularly without the appropriate training.

SPPH 552 was designed by scientists for scientists. It is an introductory course for students who would like to develop a basic ‘palette’ of science and risk communication principles, theories, and tools. Unlike other scientific and public health disciplines, there is not a single, systematic way communication can be learned or applied. Additionally, there is a tremendous amount of information on communication from a variety of disciplines, but relatively few evidence-based ‘best practices’ for public health communication. For this reason, rather than trying to gather and present everything that is ‘out there’, we have focused on the topics that we have found particularly valuable in our professional practice and synthesized that information into three main pillars: 1) the ‘mission’ (why you are communicating and who you are communicating with); 2) the ‘message’ (what you are communicating); and 3) the ‘medium’ (how, when, and where you are communicating).

The ultimate goal of the course is to provide you with the knowledge, practice, and mentorship that you can use to communicate more effectively in your future career. We also hope that the course will serve as a nidus for your ongoing, independent learning and experimentation in the field of science and risk communication.

Instructors:
Chelsea Himsworth (Chelsea.Himsworth@gov.bc.ca)
Kaylee Byers (Kaylee.Byers@ubc.ca)
**Office hours online by request.**

Resources:
“The Mission, the Message, and the Medium: Science and Risk Communication in a Complex World” is an online, open-source textbook that we developed specifically for this course. The course curriculum is aligned with the content and flow of the textbook, which contains all the required readings.

The textbook is a living document that we revise each year based on our own learning and student feedback. The textbook is also enriched with the work of our past students. You will also have the option to have your SPPH 552 assignments included in future versions of the textbook. Not only will your work help future students, but you will come out of the class with a cool communication product for your CV!
Learning Objectives
By the end of this course, a successful learner will be able to...

- Design risk communication plans and products that demonstrate understanding, integration, and application of the principles of science and risk communication presented throughout the course.
- Identify and critically analyze real-world examples that help to elucidate the principles of science and risk communication.
- Demonstrate how to select, synthesize, and implement different communication theories and tools depending on the communication objective, audience, goal, etc.
- Express themselves clearly, efficiently, and impactfully using different kinds of oral, written, and visual communication media.
- Use a community of inquiry model to engage in diverse perspectives with their peers.
- Provide productive feedback to peers and instructors and use feedback from peers and instructors to demonstrate a growth in their learning.

Course Format

Blended Learning
This course was designed in an **online blended learning format** using a combination of asynchronous (i.e., independent) and synchronous (i.e., group) learning.

**There are no lectures.** Rather, you will learn the content asynchronously through **assigned weekly readings**. Weekly, synchronous classroom time will be spent exploring and applying content through **student-driven discussion** (see the Muddiest Point assessment) and **structured, community of inquiry-style activities** that will allow you to synthesize, apply, and develop a deeper and more nuanced understanding of the concepts presented online, to work with and learn from your peers, and to receive mentorship from the course instructors.

**Synchronous Sessions**
All synchronous activities will take place during our official class time slot and will be **online using Zoom**.

The first 1.5 hours are **mandatory** with the remaining time being unstructured virtual group office hours.

Week at a Glance
There is ~ 1 module per week and, for the purposes of this course, our ‘week’ will run from Thursday to Thursday.

The general module structure is as follows:
- Module officially starts on a Thursday.
- You will have one week to complete the assigned readings from the textbook and the Muddiest Point assessment at your own pace.
- You will also spend some time working on assessments.
- The following Thursday we will have a synchronous session that compliments your reading.

**Communication**
If you have a question we would ask, wherever possible, that you post it on the Discussion board for the current week’s module.

If you require additional or immediate assistance, please email us (directly or through Canvas).
We are also happy to Zoom with you between class sessions.

We will endeavor to respond to all posts/messages within 24 hours on weekdays.
SPPH 552: SCIENCE AND RISK COMMUNICATION FOR PUBLIC HEALTH

Policies

We are committed to inclusion of all learners in this course. If you have concerns or require accommodations, please let us know.

This course abides by all campus-wide policies and regulations. UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here.

Expectations

Students are expected to be active participants in all synchronous sessions, as well as the interactive asynchronous components of course.

Students are expected to complete readings, assessments, and other tasks fully and on time. Five (5) % will be deducted from the grade for each day an assessment is late. However, each student will get one ‘free pass’ to submit an assignment up to 4 days late (except for the communication plan presentation).

Students are expected to be respectful of peers and instructors at all times.

Although it is not expected, we hope that students will genuinely have fun in our relaxed and creative learning environment.

Tips for Success

- Be curious, ask questions
- Ask for help – talk regularly to your peers and instructors
- Do the readings, and read deeply – spend time on your Muddiest Point
- Actively participate – your learning depends on your contribution to class.
- Take initiative – don’t be afraid to ask for things that will aid your learning
- Be bold, brave, and creative – communication is as much an art as it is a science. Work to cultivate your own unique ‘voice.’

Your Instructors

Chelsea Himsworth DVM, MVetSc, Dipl ACVP, PhD: I have been a Partner Faculty in the SPPH since 2015. Partner Faculty are a unique group in that we are employed by an external agency but have all of the duties of a regular faculty member. UBC recruited us because we have a unique lens through which to look at the subjects we teach. When I am not wearing my UBC faculty ‘hat’, I am the Leader for Veterinary Science and Diagnostics with the BC Ministry of Agriculture, Food, and Fisheries, as well as the BC Regional Director for the Canadian Wildlife Health Cooperative (CWHC). Science and risk communication is a HUGE part of my professional practice for both of these positions, which is why I feel passionate about this course.

Kaylee Byers PhD: I am a Postdoctoral Fellow in SPPH and the Deputy Director of British Columbia’s regional node of the CWHC. Science communication is a big part of my career but it’s also a passion of mine. I am the co-founder and co-host of Nerd Nite Vancouver (now a podcast “Nerdin’ About”) and one of the organizers of ComSciConCan and ComSciConCanWest, which are free science communication training programs for graduate students in Canada, as well as a facilitator for SciCATs, a science communication training program based in Vancouver.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Value</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>20%</td>
<td>Continuous</td>
</tr>
<tr>
<td>Muddiest Point</td>
<td>10%</td>
<td>Weekly, 24hr prior to in-class session</td>
</tr>
<tr>
<td>Project Diary</td>
<td>20%</td>
<td>Sept 23, Oct 7, Oct 21, Nov 4, Nov 25</td>
</tr>
<tr>
<td>Communication Plan Presentation</td>
<td>10%</td>
<td>Oct 21</td>
</tr>
<tr>
<td>Communication Product</td>
<td>15%</td>
<td>Dec 10</td>
</tr>
<tr>
<td>Communication Plan</td>
<td>25%</td>
<td>Dec 10</td>
</tr>
</tbody>
</table>
### Assessment Details

**Risk communication plan:** Throughout the course you will work on developing a risk communication plan for a topic of your choice. The final written plan will represent the culmination of your learning in SPPH 552 and should demonstrate your understanding and ability to integrate and apply the concepts presented throughout the course.

**Communication Product:** The goal of the assessment is for you to incorporate elements of mission, message, and medium to create the communication product of your choice. This could be an infographic, a film storyboard, or even a new section for the textbook!

**Communication plan presentation:** After we have completed the ‘Mission’ and ‘Message’ modules you will present these components of your communication plan to the class. Not only will this be an opportunity for you to demonstrate your audio-visual communication skills but you will also have the opportunity to receive feedback from your instructors and peers, which you can incorporate into your final written risk communication plan.

**Project diary:** You will each develop a living document in which you will make five (5) entries discussing how the concepts from the previous weeks' modules could be applied to your communication plan. This will allow you to think about and play around with the most important aspects of your plan well in advance of the final deliverable. Feedback received on these project diaries can then be incorporated into your final risk communication plan.

**Muddiest point discussion:** After completing the assigned readings in each module you will be asked to post to a weekly discussion board regarding any concept that remained unclear after the module and/or gave you insight/inspiration, or made you want to learn more. These muddiest points will be discussed in each week’s synchronous session.

**Participation:** A holistic assessment of the degree to which you demonstrate your engagement in the synchronous and asynchronous components of the course (i.e., the quantity, but, more importantly, quality of your participation).

### Course Schedule

<table>
<thead>
<tr>
<th>Module</th>
<th>Week</th>
<th>Title</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sep. 9</td>
<td>Welcome to SPPH 552</td>
<td>Introduction to the Course</td>
</tr>
<tr>
<td>1</td>
<td>Sep. 10 – Sep. 16</td>
<td>The Mission Part 1</td>
<td>Purpose of Communication, Goal Setting and Evaluation</td>
</tr>
<tr>
<td>2</td>
<td>Sep. 17 – Sep. 23</td>
<td>The Mission Part 2</td>
<td>Audience, Ethics, Barriers and Opportunities for Communication</td>
</tr>
<tr>
<td>5</td>
<td>Oct. 8 – Oct. 14</td>
<td>The Message Part 3</td>
<td>Developing a Narrative, Style vs. Substance, Principles of Message Development</td>
</tr>
<tr>
<td>6</td>
<td>Oct. 15 – Oct. 21</td>
<td>The Message Part 4</td>
<td>Communication Plan Presentations</td>
</tr>
<tr>
<td>7</td>
<td>Oct. 22 – Oct. 28</td>
<td>The Medium Part 1</td>
<td>Social Media, Written Communication</td>
</tr>
<tr>
<td>8</td>
<td>Oct. 29 – Nov. 4</td>
<td>The Medium Part 2</td>
<td>Film, Podcasting, Mainstream Media</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Nov. 12 - Nov. 18</td>
<td>The Medium Part 3</td>
<td>The Pitch, Face-to-Face Communication, Stakeholder Engagement</td>
</tr>
<tr>
<td>10</td>
<td>Nov. 19 - Nov. 25</td>
<td>The Medium Part 4</td>
<td>Visual Aids for Communication, Communication through Visual Art and Poetry</td>
</tr>
<tr>
<td>11</td>
<td>Nov. 25 – Dec. 2</td>
<td>The Communication Plan</td>
<td>Developing a Communication Plan, Review</td>
</tr>
</tbody>
</table>

**Midterm Break:** Nov. 5 – 11