FISH 6000: Science Communication for Fisheries

Dr. Brett Favaro

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E-mail: brett.favaro@mi.mun.ca Web: mifisheriesscience.github.io/courses/6000SciComm/
Office Hours: Thursdays 0900 - 1200 Class Hours: 0900 - 1200
Office: Marine Institute W2009 Class Room: W3029/31

This course will train students in the full spectrum of science communication. The fundamentals of scientific writing, academic publishing, and oral and poster presentations will comprise the first half of the course. The second half will focus on communicating outside the academic environment, and how to responsibly disseminate research across a range of media.

Learning Outcomes

On completion of this course, students will

- Understand what it means to be a producer of knowledge
- Understand the basic structure and function of academic journals
- Be fluent in academic publishing terminology (e.g. impact factors, h-index, open access)
- Develop competencies in the basic mediums for science communication, including:
  - Written proposals (e.g. for scholarships)
  - Academic papers
  - Scientific posters
  - Oral presentations (including the use of visual aids, e.g. slides)
- Understand that science can inform policy and public opinion
- Learn to practice safe science communication
- Develop competencies in communication to non-academic audiences, including:
  - Briefing notes for decisionmakers
  - Writing for popular media
  - Radio broadcasts

Expectations and Aspirations

This course will have a mixture of M.Sc and Ph.D students. Some of you may already have considerable experience in science communication - while others have none at all. My expectation is that by the end of this course, all students will have achieved a basic competency in all learning outcomes described above. But nobody is a perfect science communicator, and all of us, no matter how advanced, can stand to improve (myself included!). My goal is for you to **to push yourself to become a better science communicator**, and I hope to create an environment where students are

encouraged to step outside their comfort zone. In this course, I encourage experimentation and creativity, especially around the course assignments.

This is an **active course**. Every week you will write, speak, or otherwise present something to your classmates. It's going to be challenging, but hopefully a lot of fun.

Course Structure

There will be one three-hour block each week for this course. Speaking roughly, each block will include about 1.25 hrs of lecture material and 1.25 hrs of student activity.

I have a strict **no busywork policy** - meaning that all course assignments are designed to help you develop and hone your science communication skills. I encourage you to take products that you produce in this course and share them, publish them, or otherwise make use of them in your research programs.

Reference Books

Most of the readings from this course will be curated from primary literature. However, I encourage all students to acquire copies of these two reference books:

Heard, Stephen B (2016). *The Scientist's Guide to Writing: How to Write More Easily and Effectively throughout Your Scientific Career*. Princeton, New Jersey: Princeton University Press, p. 255. ISBN: 9780691170220.

Olson, Randy (2015). *Houston, We Have a Narrative: Why Science Needs Story*. Chicago: The University of Chicago Press, p. 256. ISBN: 9780226270845.

Course Policies

Social Media

Students are welcome to tweet about the course using the hashtag #MISciComm - but the Chatham House Rule is in effect. That means you **may not reveal the identity of the person speaking** in your tweets without their express permission. We want to encourage people to actively participate and make mistakes without fear of their mishaps being broadcast acrosst he world.

Code of Conduct

You have the right to expect a supportive, safe environment in this course. This course will be governed by our Fisheries Science Code of Conduct, which all participants are expected to respect.

Digital Competency

Students are expected to have basic computer competency. You should be able to operate Microsoft Word, Powerpoint, and Excel, or equivalent (e.g. OpenOffice or Google Docs). You should be able to download and install software onto your computer. If you lack these skills, please consult training materials prior to beginning the course. **Please bring a laptop to every class.**

E-mail Policy

E-mail is not a primary tool for communication in this class. If you have questions about course content, your order of operation should be:

1. Check the syllabus
2. Ask in class, or discuss with colleagues
3. Ask on Slack (this way, everyone can benefit from an answer)
4. Request a meeting with me

If emailing me a meeting request, use the subject line "FISH 6000: Meeting request." Please indicate three potential meeting times (I prefer afternoon meetings) and explain in 1-3 lines what you want to meet about.

E-mail is impersonal, burdeonsome, and adds to confusion.

Class Participation

There will be a LOT going on in this class. Most assignments are completed mostly in-class time. The class is highly collaborative, meaning you need to be present to do it.

Accomodations will be made for serious illness or other extenuating circumstances. However, it is the student's responsibility to stay caught up with course materials - and missing in-class activities will result in a decreased participation grade.

So please, don't make it part of your plan to miss class!

Academic Honesty

This course is governed by MUN's regulations on academic misconduct.

Course Schedule

Week 1: The Production of Knowledge - Sept 11

Week 2: The Science Publishing Ecosystem - Sept 18

Week 3: Proposals - Sept 25

Week 4: Anatomy of a Science Paper (Part 1) - Oct 2

Week 5: Anatomy of a Science Paper (Part 2) - WED Oct 11

Week 6: Oral Talks - Oct 16

Week 7: Posters - Oct 23

Week 8: Presentation Week - Oct 30

Week 9: Popular Writing, and Practicing Safe Science Communication - Nov 6

Week 10: Radio, Podcasts, and Interviews - FRI Nov 17

Week 11: Policy Briefs - Nov 20

Week 12: Recap and Wrap-up - Nov 27

Assignments and Grading

30% of your course grade is earned by participation:

- 50% for general participation
- 50% for engagement for in-class assignments

70% of your grade will be earned by completing the following submitted assignments:

Assignment	Start in	Due in	Value
Journal	Week 3	Week 12	10%
Proposal	Week 3	Week 4	10%
3 Minute Proposal	Week 7	Week 9	15%
Poster	Week 7	Week 8	5%
Popular Article	Week 9	Week 11	15%
Podcast	Week 10	Week 12	15%

Please see the Assignment Guide for more information