

FISH 6000: Science Communication for Fisheries - Assignments

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30% of your course grade is earned by participation:

- 15% for general participation
- 15% for engagement within 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 Thesis	Week 7	Week 9	15%
Poster	Week 7	Week 8	5%
Popular Article	Week 9	Week 11	15%
Podcast	Week 10	Week 12	15%

This document outlines the details and grading criteria for each assignment.

Writing Journal

There are 104 weeks in an M.Sc program, and 208 weeks in a Ph.D. Time disappears quickly when you start doing research, and getting done on time means making progress each and every week. And staying motivated means rewarding yourself for the progress you make.

In **Week 3** you will begin a *writing journal*, which you'll complete during meetings with your *writing team*. Every week, you will meet with your team (i.e. 2-3 fellow students) and discuss three things:

1. What were your goals from last week?
2. Did you achieve those goals? Why or why not?
3. What are your goals for the coming week?

This sounds scary, but is designed to help you establish good work habits early in your graduate program, and maintain them throughout.

Deliverable:

Using whatever medium you want (Word doc, .txt file, notebook, napkins, stone tablet) write down your answers to the above questions each week. Make SMART goals (Specific, Measurable, Attainable, Realistic, Time-based). You will submit the full journal in week 12, and will be given grades for completing the exercise.

Timeline

You will make your first entry in Week 3. You will have time in class each week to complete entries. Final entry in Week 12.

Value: 10% of course grade

Grading scheme:

Fill out one entry per week, for a total of 10 entries (weeks 3-12 inclusive).

Each entry is worth 1/10.

Proposal

Most research starts with a proposal, and graduate school is no different. In this assignment, you will produce a research proposal.

By default, you will follow the format required by NSERC postgraduate scholarships. For M.Sc students, follow the M.Sc instructions. For Ph.D students, please follow the Ph.D instructions.

If you are not a Canadian citizen, or already received an NSERC scholarship, I encourage you to find a small project grant or alternative scholarship and write a proposal for that. Whichever fund you apply for, it should require a proposal of a minimum of one page - although if there is a relevant fund that requires a shorter proposal, it could be

Deliverable:

On page 1, answer:

1. Am I personally eligible?
2. Is my research eligible?
3. What external support do I need (e.g. reference letters, \$)?
4. What are the deadlines?
5. Will I be competitive?
6. What are the specific formatting requirements, and how are they submitted?

Page 2 and beyond: A fully formatted, complete proposal for the funding agency of your choice.

Timeline

1. Identify which fund you will apply for (**Week 2**).
2. Begin proposal during class (**Week 3**).
3. Submit draft proposal to a peer (**By Wednesday of Week 3**).
4. Peer reviews your draft (**Meet with peer on Thursday or Friday of Week 3 to discuss**).
5. Submit revised proposal to instructor (**Week 4**).

Value: 10% of course grade

Grading scheme:

- Proposal follows instructions of funder /5
- Appropriate language - good grammar, no typos, jargon minimized or explained /5
- Narrative structure - does the proposal make the reserach goals clear? /5
- Study is placed in context of literature on the topic /5

3 Minute Thesis Proposal

Scientists talk - a lot. But it's important to be able to speak concisely, and in a way that communicates our work effectively in a short period of time.

You will prepare a three minute proposal talk (analogous to the 3MT competitions held around the world).

The rules are as follows: - The talk can be no more than three minutes. At 3:01 you will be asked to stop - It should clearly outline your proposed research program - You should include at least one figure, expressing your expected results in graphical format. This is not expected to be real data

Deliverables:

- Week 8: Present a draft talk to a small group (or, if the class is small, to the entire class).
- Week 9: Present the final talk to the entire class.

Timeline

1. Assignment is introduced (**Week 7**)
2. Rehearsal talk conducted in small groups (**Week 8**).
3. Submit completed proposal to instructor (**Week 9**).

Value: 15% of course grade

Grading scheme:

- Compliance with rules, including length below 3 minutes /5
- Comprehension and content /5
- Engagement and communication /5

Poster

In this assignment, you will build a ‘proposal poster’ - that is, a scientific poster explaining the research you plan to conduct within your graduate research program. In Week 7, we will discuss poster design theory, as well as the fundamentals of sound scientific poster design. Here, you will have the chance to develop a poster based on these principles.

You may use a template provided as the basis for your poster, or you may design one from scratch.

Deliverables:

A complete scientific poster, which will be displayed via projector in class. You will present the poster, outlining the design you chose and why.

The presentation will occur in two steps. First, you will have up to three minutes to explain your proposed research. The audience will have the opportunity to ask 1-2 questions.

Second, you will have up to three minutes to discuss why you designed the poster the way you did. What were you hoping to achieve? What trade-offs did you

Timeline

1. Design a draft poster in class, collect peer feedback (**Week 7**)
2. Present poster to class (**Week 8**).

Value: 5% of course grade

Grading scheme:

- Aesthetics: Poster follows design principles outlined in class (large text, few words, etc.) /5
- Scientific content: Poster clearly communicates the proposed research /5
- Presentation of poster - design trade-offs explained, student self-assesses poster well /5

Popular Article

Your research in fisheries likely affects a great many people, most of whom will never read a scientific article. In this assignment, we will practice writing for mainstream audiences - communicating science in a way that is digestible by a non-expert on the topic.

Here, you will select a type of popular article, and write about your proposed research program in that format. What will you be researching, how will you do it, what do you think you may find, and why will it matter? These are the questions you will try to answer within this article.

This piece should be short (<500 words) and tailored towards any non-scientific outlet. Suggested styles: * New York Times * Science article in the Economist * Huffington Post blog * Feature article in the university Newspaper * Article in The Navigator or the National Fisherman * Wikipedia article (on a topic without a current article)

Deliverables:

An article, written for a non-academic outlet, that explains your proposed research. The article should be clear, engaging, and tailored appropriately to your target outlet.

Timeline

1. Select an outlet for this article. Write a rough draft. Get a colleague to read it out loud back to you - note where they stumbled in reading. (**Week 9**)
2. Revise your draft, pair up with a different colleague and again get them to read it out loud back to you. Again, note where they stumbled, and revise (**Week 10**)
3. Submit final version (**Week 11**)

Value: 15% of course grade

Grading scheme:

- Article follows the style of the targetted outlet, and “sounds like” an article that you would read in that medium /5
- Clear, well-written, engaging /5
- Effectively communicates the proposed research /5

NOTE: If you can get your finished article accepted for publication (not counting Wikipedia), I will give you 100% on this assignment.

Podcast

In this assignment, you will produce a one-minute voice-only summary of your thesis research. Much like the popular writing assignment, you need to communicate what you're trying to do, what you think you may find, and why it matters. But this time, you have only your voice to do it.

As with other assignments, you will start by writing a draft script in class and read it to colleagues for feedback. The following week, you will read a revised version to them and collect further feedback. Between the 11th and 12th week, you will perform your one minute podcast and record it, for playback in week 12.

The entire class will listen to the podcasts in week 12. After your podcast plays, you will lead a very short Q&A, recounting what you felt worked and what didn't work in producing the podcast.

Deliverables:

A recording of a one-minute podcast, and a student-lead discussion reflecting on the podcast.

Timeline

1. Initial draft is written, performed to colleagues, and feedback collected (**Week 10**)
2. Revised draft performed to colleagues, feedback collected (**Week 11**)
3. Between **Week 11** and **Week 12**: Record final podcast
4. Present and discuss podcast (**Week 12**)

Value: 15% of course grade

Grading scheme:

- Podcast is less than 1 minute in length /3
- Student maintains appropriate speaking speed, speaks clearly /5
- Effective communication of scientific content /5
- Student leads an effective and self-reflective discussion /2