BISC 410 Capstone Project Fall 2021

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For this capstone project you will choose one of the two options described in more detail below.

One project that relates to topics discussed in tutorial will be a **Relationality and Community Building Portfolio** project, to practice self-learning and reflection, and to identify how one might connect with Indigenous communities.

The other option that relates to topics discussed in tutorial is for you to write a **Dominant Science Research Proposal**, in an NSERC Master’s style with an additional anti-colonial and anti-racist lens. For this option, you will focus on a specific animal (humans included) behaviour and ask, “why did this behaviour evolve?”.

The project is worth 20% of your BISC 410 grade, and will include the following:

- 4% for project **presentation** (October 25th, 2021)
- 8% for project **first draft** submission (November 8th, 2021)
- 8% for project **second draft** submission (December 6th, 2021)

**Presentations (~4 minutes max, but does not need to be that long):**
The purpose of this presentation is to share preliminary ideas for the capstone project you decide on, and to build connections and get feedback, from both classmates and me, before you look into the project further. You can use this as a “check-point” for yourself to get a better sense on what things you would like to cover in your project.

**Relationality and Community building portfolio presentation:**
For this presentation, you won’t have come up with a community-building plan yet; but having completed the positionality and gift-exploring activities, it’s helpful to share these findings to get broader perspectives on how others might find value in those gifts before undertaking those later, and more difficult, steps of accountability.

A big part of this presentation will talk about (refer to tutorial 4 slides for more details)→

- What is your own history (family history and positionality)
- What are the gifts you have? i.e. talents, skills you have from an Indigenous point of view i.e. the gifting economy and reciprocity.
- What and who are you accountable to, in research, life, relationships, and all things?
- How would you build community/connection with Indigenous communities?
- How would you maintain community/connection with Indigenous communities?

For this option, only share what you are comfortable sharing with the class. For the actual submission of the project please let me know if you do not feel comfortable sharing certain aspects with me. *The ideas and things you share for this presentation do not need to be finalized, however some effort needs to be put into addressing each category. Additionally, information for these sections aside from positionality and gifts should be referenced. Additional readings, watchings, listenings, will allow for deeper thought*.
Dominant Science presentation:
The goal is to present some of your preliminary ideas, hypotheses, and methods to 1) practice presentation skills; 2) get feedback on your project from classmates and me; 3) start to incorporate this feedback into your project. Your ideas and content do not need to be finalized, yet, and this will be a “lab meeting” style environment to get feedback on the early stages of your proposal.

- Propose behaviour in question (animal, location)
- Objectives/hypotheses
- If previously studied what was found?
- What sorts of methods and analysis might you perform?
- Anticolonial/decolonial aspects of your proposal

Project Descriptions:

Relationality and Community Building Portfolio project:
The Anticolonial and Decolonial movement has too long been discussed with very little action being taken by groups other than Indigenous-led movements. Joining these movements is important and as future leaders, thinkers, doers, and many other things, it is a responsibility to start taking these ideas and actions seriously and to implement them in our lives. Therefore, in this project you will do something that will enhance and enrich your learning of other perspectives and viewpoints, and outline how your own history and perspectives shape how you conduct your research, education, and daily life. This project will produce a document that will help inform Indigenous communities (First Nations, Inuit, Métis, and any Indigenous community worldwide), yourself, and others about who you are, and what your gifts and intentions are. This document and plan may ultimately be a useful part of how you foster meaningful relationships with both Indigenous communities and the living world around you.

***In this project you should not be contacting Indigenous communities unless you are already a part of an Indigenous community or network. The purpose is to prepare you for future relationship-building. You should ask yourself, are you the right person that should be reaching out to Indigenous communities, will you have a short tenure in a location? Is it appropriate during the ongoing COVID-19 pandemic? Relationship building takes time, and years (if not a lifetime) and there should be a commitment to developing relationships with people from Indigenous communities.

For this project, you will address the following topics, with guidance and support from me and other resources (refer to tutorial 4 slides for more details):

- Positionality exercise about your family history and place in the world.
  - You can think about this in relation to why you chose to study science, and biology in particular (using Dr. Alix Shield positionality assignment from ENGL 359 as a rough guide https://www.lib.sfu.ca/system/files/35664/shield_positionality_activity_final.pdf)
  - Examples of things to cover: how did your family come to live in Canada, in BC, in the Metro Vancouver area?; how are you connected to the lands you grew up on and/or live on as an adult?

- What are the gifts that you can share with peoples and Indigenous communities?
  - Before building connections, it is important for you to think about what you offer to a community (i.e. your gifts)
Identify gifts from an Indigenous point of view based on the gifting economy that has reciprocity embedded in the things done, seen, and acted.

- Refer to http://www.gift-economy.com/womenand/womenand_indigenous.html
- Marie Battiste “Reclaiming Indigenous Voice and Vision”

• How might you build connections with Indigenous communities?
• How will you maintain connections, what are you accountable for/how will you remain accountable to the community, to yourself, to your supervisor, etc.

The length of your final report will be approx. 2-5 pages. This report can be written, but we can also discuss other ways of doing this if you have ideas e.g. artwork, comic strip, visualization, concept map, podcast, video.

Information for these sections aside from positionality and gifts should be referenced. Additional readings, watchings, listenings, will allow for deeper thought and reflection around these ideas and topics. Refer to the BISC 410 additional readings page for more resources.

Dominant Science Research Proposal:
In this project you will be choosing an adaptive animal behaviour (humans included) and writing a dominant science research proposal using an NSERC MSc. style. You will also enhance this proposal by incorporating anticolonial/decolonial concepts and ideas. The anticolonial portion of this project is worth 30% of each submission (i.e. 30% of presentation, 30% of first draft submission, and 30% of second draft submission). You are welcome to discuss more than one question and how it relates to the behaviour you are interested in. Refer to topics and resources discussed in tutorials to help guide you on these sections.

For this project, you will address the following topics, with guidance and support from me and other resources (refer to tutorial 4 slides for more details):

- Objectives
- Background
- Context (literature review)
- Methods
- Predictions and potential results and interpretation
- Significance
- Anticolonial/decolonial aspects should be addressed throughout the proposal
  - Some guidance and suggestions for this can be found on the marking rubric as well as throughout our tutorial sessions.

We wish to thank everyone who's contributed in any way to this project and course. Any success that we've earned can be entirely attributed to them. Please forgive any mistakes we've made, any inconsistencies, grammar, and pronunciation. We have learned a lot along the way and hope you all can carry forward your learnings to share with others, as well as continue to reflect deeply on the learnings and reach out and strive to learn more.