INSTRUCTOR

Fall: Dr. Sigal Balshine  Office: PC-309  Email:sigal@mcmaster.ca

Please use PNB4SC6 in the subject of any email message you send me. Information about weekly office hours will be available on Avenue to Learn (Avenue). Please do not send messages via Avenue mail, as the TAs and I do not check this inbox on a regular basis.

COURSE MEETINGS

We will meet virtually online on Tuesdays: 14:30-16:20 on and Thursday 14:30-15:20 during the fall. Every Tuesday we will have an on-line classroom between 14:30-16:20, the lecture will be live-streamed during scheduled course times and recorded via Microsoft Teams or Zoom. These recordings will be made available for review at later times and dates but you are encouraged to attend. On Thursdays 14:30-15:20, we will have small group tutorials with a TA leading the discussion. You will be working with your TAs and your classmates virtually (in real time) during this hour. These tutorials will not be made available online and you are expected to attend in person and participate online. Details of how to access lectures and tutorials will be made available at the beginning of the course via Avenue to Learn.

TEACHING ASSISTANTS

Teaching Assistants will work closely with students in the capacity of communication mentors to provide support. The TAs are the first port of call if there are questions or problems of any kind.

COURSE DESCRIPTION

The COVID-19 pandemic has made clear that science plays a major role in our lives and can shapes the way our society works. The need for effective science communication has never been greater. In this course, students will explore why we need to communicate science well, the importance of knowing your audience, and best practices for a range of science communication approaches from traditional print, radio and television media, to online (the internet and social media).
**COURSE AIMS**

Through active participation in class activities, students will develop science communication literacy skills by thinking about the answers to questions such as:

1. Why is effective communication an essential life skill?
2. How do great presenters connect with their audience?
3. What are the ingredients of a well-designed PowerPoint slide?
4. How journalists and scientists might be more alike than we think.
5. Why do so many people choose not to believe scientific theories?
6. What does storytelling teach us about engaging with an audience?
7. How presentations should be delivered to change thoughts and behaviours.
8. How do we become literate consumers of information and spot and debunk fake news?
9. How can you redefine your message for different audiences?

**COURSE OBJECTIVES**

By the end of the course, students will:

1. Learn how to present complex science ideas to a variety of audiences,
2. Work in teams to develop their interpersonal communication skills, and
3. Create a blog, podcast, infographic and outreach project that provides evidence of their learning about best practices when communicating science.

**REQUIRED TEXTS & OTHER MATERIALS**

We will post weekly readings and other links on Avenue. In addition the following text is required reading and will be discussed in tutorials.

Escape from the Ivory Tower by Nancy Baron Island Press 2010
ISBN: 9781597266642
ASSIGNMENTS

Assignment 1: News Brief Your first task involves learning to write a policy brief or a 500 word news brief about short empirical article, or talk for McMaster Daily News. The brief should be about empirical paper in psychology, neuroscience, and/or behaviour that has been recently published and interesting and noteworthy. Your news brief must be written at a 6th grade reading level (this is the level used by most local newspapers, e.g., the Hamilton Spectator) and must be interesting enough for the general reader. The purpose of this assignment is to learn how to accurately report on complex science in a way that is interesting to people who have little to no interest in consulting the original source, and who are therefore dependent on the accurate dissemination of its content. You will produce this brief of your own, and will also provide feedback on your peers’ reports.

Assignment 2. Science Blog Write an engaging 600-1200 word blog for teenagers about an empirical article of your choosing. Use the brevity and accuracy skills that you learned in Assignment 1 but expand the analysis and depth. You will work on this blog on your own.

Assignment 3. A Podcast Episode In pairs, you will create a script for a 10-20 minute podcast and record the podcast about a selected topic. The aim of the podcast is to raise awareness on the societal implications of science. Topics will be discussed in tutorials. The podcast will discuss moral and ethical issues connected to various scientific practices and results and is intended to be for a broad audience (i.e. non-experts and the general public).

Assignment 4. Community Engagement Project You will be working in groups for this last assignment as well as with volunteers from McMaster’s Let’s Talk Science Chapter. Let’s Talk Science is a national charitable organization focused on motivating and empowering kids and teenagers via outreach activities about how to usefulness of science, engineering and research. The goal of this project is to create much needed STEM outreach material on various science topics that will be used in the community (i.e. in schools) by Let’s Talk Science mentors/volunteers. This project will allow you to have a chance to create an infographic about your chosen topic and also to consider ways in which Western science and indigenous knowledge might be integrated and explored.

EVALUATION/GRADING

Assignment 1: New Brief = 10%
Assignment 2: Science Blog = 15%
Assignment 3: Podcast Episode = 25%
Assignment 4: Community Engagement Final Project = 40%
Participation: Participation in class and tutorial and discussions = 5%
Note Taking: Everyone will submit 1 week worth of lecture notes = 5%
McMaster University Statement on Inclusivity and Academic Integrity:

The University values integrity, inclusiveness and teamwork, and strives to support the personal and collective growth of the McMaster student community.

These values are foundational to ensuring campus environments – both in-person and virtual – are conducive to personal wellbeing and academic success.

Inclusivity and a Culture of Respect

As a McMaster student, you have the right to experience and the responsibility to demonstrate respectful and dignified interactions within all of our living, learning and working communities. Expectations are described in Code of Student Rights & Responsibilities

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students’ access to these platforms.

Additional information about the Code and etiquette can be found here

Academic Integrity and Honesty

As a McMaster student, you are expected to exhibit honesty and ethical behaviour in all aspects of the learning process. The academic credentials that you earn are rooted in the principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, (e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript which reads: “Grade of F assigned for academic dishonesty”) and/or suspension of expulsion from the university).

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy.

Some helpful information can be found here