LIFESCI 4P03 – Science and the Media

Instructor
Katie Moisse, Ph.D.
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Office location and hours
BSB 201A/D
Mondays and Thursdays 9:30-11:30 (drop in any time)
Tuesdays and Fridays 1-3 (please email in advance)

Class times
Wednesdays 11:30-2:20

Course description
Most people hear about scientific discoveries in the news or on social media. How journalists and bloggers cover these discoveries can shape the public opinion of science and even influence policy decisions. In this course, we’ll take a critical look at how science is portrayed in the media and examine the consequences of poor science communication. We’ll discuss ways to translate complex concepts into terms anyone can understand and explore different forms of science communication, from articles to interactives to podcasts. We’ll also talk to scientists and journalists about ways to make stories about science accessible without forsaking accuracy.

Learning objectives
• To learn how to explain science to a range of audiences for a variety of purposes;
• To understand how the public gets their science news and recognize some of the challenges faced by researchers, scientific publishers and journalists;
• To appreciate how science journalism can shape public opinion and policy;
• And to develop a lifelong love for excellent science journalism.

Required reading
There is no textbook for this course. I’ll provide links to studies and news articles or interactives in advance of each class on Avenue to Learn. Please bring a laptop or smartphone to class if you can. In addition to the assigned reading for this course, you’re expected to read, share and discuss examples of science journalism throughout the term.
Course evaluation:

Translations and fact-checking: 40 percent
You’ll write four 300-word ‘translations’ of scientific studies for a range of audiences. I’ll give you a selection of studies to choose from and tell you the target audience.

Op-eds: 40 percent
You’ll write two ~800-word opinion articles about a scientific study, policy or controversy. For each article, you’ll submit an outline detailing the topic and your arguments. This outline will make up 5 percent of your overall grade. Each complete op-ed will make up 15 percent of your grade.

Multimedia seminar: 20 percent
In groups of five, you’ll create a multimedia project that blends text with audio or visual elements to bring a science story to life. You’ll propose the project in a ‘pitch’ worth 5 percent of your grade. The finished project will make up 15 percent of your grade. You’ll present it to your peers at the end of the semester.

Topic schedule (subject to change)
Jan. 10: Introduction to science communication
Jan. 17: Translation techniques
Jan. 24: Making an argument
Jan. 31: Visualizing data
Feb. 7: Handling uncertainty
Feb. 14: Communicating controversies
Feb. 28: Science and politics
March 7: From studies to stories
March 14: Careers in science communication (guest speaker)
March 21: Engaging with scientists (guest speaker)
March 28: Seminar work
April 4: Seminar presentations

Deadlines
Translation 1: Jan. 24 before class
Outline for op-ed 1: Jan. 31 before class
Translation 2: Feb. 7 before class
Op-ed 1: Feb. 14 before class
Translation 3: Feb. 28 before class
Outline for op-ed 2: March 7 before class
Group project pitch: March 14 before class
Op-ed 2: March 28 before class
Translation 4: March 28 before class
Group project presentation: April 4
Student responsibilities
You’re expected to attend every lecture and participate fully in group projects and online discussions. You’re expected to submit assignments on time. If you cannot, you must file a McMaster Student Absence Form.
You’re also expected to engage with me and our invited speakers. You’ll get the most out of this class if you embrace the required reading as part of your regular routine as a person interested in science.

Academic integrity
You’re expected to understand and adhere to the McMaster University Academic Integrity Policy and the Student Code of Conduct. All assignments will be checked for plagiarism.