Biol 3700: We Need to Talk … About Science  
Course Syllabus  
Spring 2021  

Instructor: Nikki Letawsky Shultz, Ph.D.  
Office Location: 3-104 MCB  
Office Hours: Thursday from 11:00-12:00 PM or by appointment  
Phone: 612-624-7537  
Email: nlshultz@umn.edu  
Personal Zoom Link: https://umn.zoom.us/my/nikkils  

Course Day/Time: TBD, TBD via Zoom  

Spring 2021 Notes:  
For the Spring 2021 semester, this course will be taught remotely. Remote instruction means that this course will be taught in real time via online learning methods such as Zoom meetings. Remote (synchronous) instruction has many of the same expectations of a traditional in-person class with some unique to online learning. This course is not self-paced and you are expected to keep pace with the schedule and requirements.  
I appreciate that some students will be limited by or will not be able to attend synchronous meetings effectively due to situations such as being an international student at a removed time zone from US Central Time, having technology, internet or connection issues or being impacted by disabilities among other things. I want to support you as we navigate this remote learning environment and provide appropriate resources to help you be successful and gain as positive and equitable an experience regardless of various COVID-19 impacts. In addition, I’ll regularly ask for feedback throughout the course and be adaptive to your suggestions and needs. It’s easier when I know what’s happening or challenging, so let’s connect and figure it out together!  

Course Description:  
This 1-credit seminar is designed for CBS students to learn effective practices to have “better” conversations in their professional and personal lives about science. We’ll consider current scientific concepts through popular media, particularly the NPR Short Wave Podcast, and have everyday conversations about science and health concepts. We’ll also discuss scientific discoveries that have had substantial benefit for society through examining the Nobel Prize and consider who has (and hasn’t) been recognized. Our purpose is to create a community space for students who want to connect about science, as well as learn how to more effectively discuss such topics with our friends, families, and personal relationships to increase scientific understanding in our society. The point is not to become an “expert” on any scientific topic but rather to support future scientific leaders with talking about science concepts with those they care about.  

Course Learning Objectives:  
The guiding question for this course is: How could we communicate science better in daily life? This course is designed to allow you opportunities to:  
• Talk about current scientific topics as shared in popular media  
• Consider the conditions and behaviors that contribute to “better” conversations, especially with regard to disputed ideas  
• Demonstrate an openness to other perspectives  
• Increase your ability to engage in meaningful conversations about scientific concepts  
• Discuss approaches to issues and challenges facing leaders in scientific communities  

Course Readings:  
For this course, we’ll be using the following learning resources:  
National Public Radio’s Short Wave podcast, How to Save a Planet Podcast, Daniel and Jorge Explain the Universe Podcast  
Additional course materials available via Canvas  

Attendance & Participation  
All members share responsibility for the success of this course. As such, you are expected to participate actively in each class session. Doing so requires you to attend every class session for the full period, having prepared by reviewing learning materials prior to coming to class. Learning materials offer us a common language with which to explore our thinking and by themselves do not determine or create our thinking; that is your job as a learner and I have spent time creating prompts to get you thinking prior to class (especially for those who would benefit from time to contemplate or consider the discussion topics prior to our class period).
I subscribe to the idea of authenticity (i.e., real talk) - I want you to share your thoughts, reflections, criticisms, and half-formulated ideas in a way that is open to possibilities and helps us contemplate together. There are always “easy” answers to share in classes, but I’d much rather that we spend our time exploring the complexity involved with being our best selves and working with others by speaking honestly about our thoughts and opinions in this class, getting curious about where those come from and holding space for others do the same.

Good thinking comes from a critical eye willing to look beyond what is claimed to pursue a number of very important questions.

- Do I understand what is being explained?
- Do these ideas fit my experience of the world (or not)?
- Do they change how I think about the world (or not)?
- What are the implications of these ideas; how do they translate into practice?
- How do they encourage me to act or how I work with others?
- What are the issues that emerge from these concepts and ideas?
- How do others see these same issues?

You will be asked to make thoughtful contributions in large and small group discussions and share your informed reactions to learning materials, speakers, and general class discussions.

Attendance is expected, as being in class will allow you to be actively involved in the course content and participate in class activities. If you don’t attend class, you will lose the chance to discuss the material and learn from your peers, and your peers will lose the chance to learn from you. If you need to miss class, you must contact me prior to class and receive consent to have an excused absence from class. You may be asked to provide documentation for your absence. Excused absences are likely to include illnesses and emergencies.

Class Etiquette:
You are expected to exhibit kindness, courtesy, and respect toward your instructors and fellow students. It is important to seek to understand different viewpoints, values, and opinions in order to create a positive learning environment for everyone. HOW YOU SHOW UP MATTERS. Please keep in mind the following expectations and values during class discussions:

- We are all leaders who will learn from each other respectfully
- Each of us brings unique and valuable experiences, identities, and contributions to this course
- Our learning will only be as meaningful as the community we create together
- Our space is a place where you are free to change your mind, ask real questions, and have fun

I will do my best to answer your questions, support you, provide assistance, challenge you, and respect your opinions. I will make sure I am accessible to you throughout the class and consider your feedback and goals when making plans for our time together. Feel free to contact me at any time if you think there are opportunities to improve the course.

Course Requirements, Assignments & Grading:

This course is graded Pass/Fail (S/N). You must earn a minimum of 140 out of 200 possible points to earn a grade of “S” for the course. Points can be earned as follows:

Issue Paper (25 points)
Choose an that is generally considered settled within the scientific community and yet remains “controversial” or “debatable” among the American public. Some possible topics include vaccines, oil drilling in the Arctic, animal testing, embryonic stem cell research, climate change, and genetically-modified organisms, though you are free to choose other topics. In 2 pages, you’ll write a brief that outlines some of the relevant data on the topic, explore some of the different viewpoints people hold and the basis for these viewpoints, as well as offer suggestions for science-educated people to engage in dialogue with other viewpoints.

Nobel Nomination Letter (25 points)
Choose a significant contribution in your field or another scientific area that the Nobel Prize is designed to recognize and prepare a nomination letter for an individual or team. Your letter should include a summary of the contributions of nominee(s) for an informed-but-lay-audience (not too many technical terms!) and a convincing rationale for why this work is significant for society and the field. This paper should be 2-3 pages in length, typed in 12-point font, and double-spaced with one-inch margins. You must reference and cite the nominee’s published work, as well as any appropriate supporting evidence for the significance of the work’s impact (APA style preferred). Submit your papers via the Canvas website. You will also share your nomination in an informal 5-minute overview presentation in-class on X.
Social Media Campaign (25 points)
Choose a scientific topic and create a social media campaign to educate the public on your topic. You may individually use Instagram, Twitter, or Facebook or a combination of these platforms. Each of these should have a small paragraph of information, strong visual component, and hashtags for the posts.

Conversation Reflection (10 points)
In this one-page thematic summary, you will reflect on a conversation about a scientific topic with a non-science-educated person with whom you have a personal relationship. How did the conversation go? Analyze your conversation using the conversation frameworks we’ve discussed in class (Headlee book or The Better Arguments Project). Submit your summary via Canvas and bring a copy to class for an extended discussion.

Student Contributions (15 points)
As this is a discussion-oriented course, the way you show up in our community is important (and that you do show up!). As such, you will be graded on the contributions you make to this learning environment, and how you engage with and create space for others. Contributions will include how you demonstrate personal accountability and effective communication in this course, e.g. arriving to class on time, working productively with others, engaging with the learning materials, considering others’ points of view, offering your perspective in discussion, being “present” while in class, and taking responsibility to ensure that all assignments are submitted accurately and on time. Your ability to complete all required tasks (including assignments or homework) and attend class will also be counted as part of this grade.

Class Policies:

Late Work:
1. Grace period for one assignment. I realize that personal, medical, and miscellaneous events that prohibit students from turning work in on time do arise, and since this class is comprised of responsible adults, I have no desire to closely monitor reasons for late work. A 48-hour grace period will be granted once per semester to any student needing to take advantage of this policy. You are under no obligation to explain the circumstances to me, and the grace period can only be utilized once during the course of the semester.

2. Late work beyond the grace period will have 10 percentage points deducted from the total score per day, unless you have contacted me before the due date and made prior arrangements.

The earlier you can talk to me about late assignments, the better. I understand that “life happens,” and that sometimes it is hard to meet all your deadlines. Please come and see me, and we can discuss your options for doing your best to complete the work in a timely fashion. If you do need to request an extension, I will ask that you write us an email so that I have a record of what your new deadline is. Please note: Missing a class session does not excuse you from completing any future assignments on time.

Schedule of Classes: The schedule of classes is included on the Canvas site and materials for each week in the “Module” view. Please remember this syllabus is a working document to guide us during the semester. There may be times we decide to pursue different subjects than what are directly stated in the syllabus. Therefore, this document is subject to change.

University Policies:

Student Conduct Code:
The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means “engaging in behavior that substantially or repeatedly interrupts either the instructor’s ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities.”

Use of Personal Electronic Devices in the Classroom:
Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Scholastic Dishonesty:
You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty; http://www1.umn.edu/oscai/integrity/student/index.html. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences:
Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see: http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html.

Appropriate Student Use of Class Notes and Course Materials:
Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Sexual Harassment:
"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf

Equity, Diversity, Equal Opportunity, and Affirmative Action:
The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EQ_AA.pdf.

Disability Accommodations:
The University of Minnesota views disability as an important aspect of diversity, and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office on your campus (612.626.1353) to arrange a confidential discussion regarding equitable access and reasonable accommodations.
• Students with short-term disabilities, such as a broken arm, can often work with instructors to minimize classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above.

• If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor early in the semester to review how the accommodations will be applied in the course.

• If you are registered with the DRC and have questions or concerns about your accommodations please contact your (access consultant/disability specialist).

Additional information is available on the DRC website: diversity.umn.edu/disability or e-mail drc@umn.edu with questions.

Mental Health and Stress Management:
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

Academic Freedom and Responsibility:
Academic freedom is a cornerstone of the university. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgement and to engage in a sustained and independent search for the truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgement about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.