

Race, Gender, and Identity in the 21st Century Scientific Community.

FYS

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Office: Manchester 388

Course Website: <http://users.wfu.edu/gemmerj/FYSS23.html>

Canvas: The syllabus and grades will be posted on Canvas

Office Hours: T 10:00-11:00, W 12:00-2:00, Th 1:00-3:00

Class Meeting Times: MWF 10:00-10:50

Class Location: Manchester Hall, Room 017

Diverse Teams Feel Less Comfortable — and That's Why They Perform Better
by David Rock, Heidi Grant, and Jacqui Grey
November 22, 2018



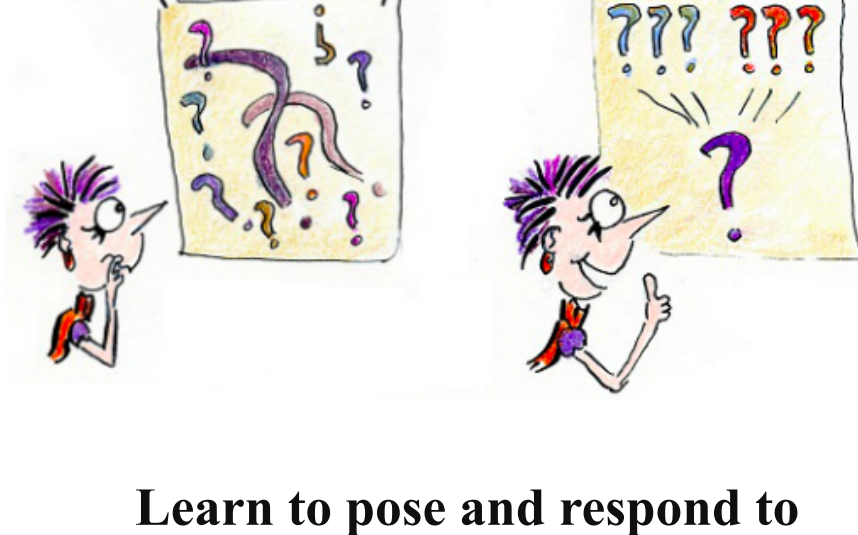
COURSE DESCRIPTION

In this course students will examine, discuss, and critically analyze disparities in representation within the scientific community, issues facing diverse groups in the sciences, and paths towards a more inclusive scientific community. To achieve this, during the first nine weeks of this course, we will focus on specific topics drawn from the philosophy of science, the origins of scientific thought, racism and gender discrimination in the scientific community, and discrimination against the LGBTQ community in science. In the remaining five weeks of the course students will learn about positive approaches that can be taken to create a more inclusive environment in the sciences. Specifically, students will learn about intersectionality, the benefits of diversity to science, stereotype threat, teaching, science education, and mental health and sexual harassment. The inclusion of topics in education is intentional as it provides mechanism for helping the instructor to become a better teacher by having frank discussions with the students while at the same time allowing students to grow as mentors. Engagement with students during class time, except for the first week, will be entirely driven by student discussions led by a student leader (see below for specifics) and moderated by the instructor. By the end of the course students will be able to: (i) critically read literature on diversity in the scientific community, (ii) understand how culture affects science, (iii) identify and understand some of the psychological and sociological challenges that underpin challenges faced by different groups, (iv) understand implicit bias, stereotype threat and their effects.

OBJECTIVES



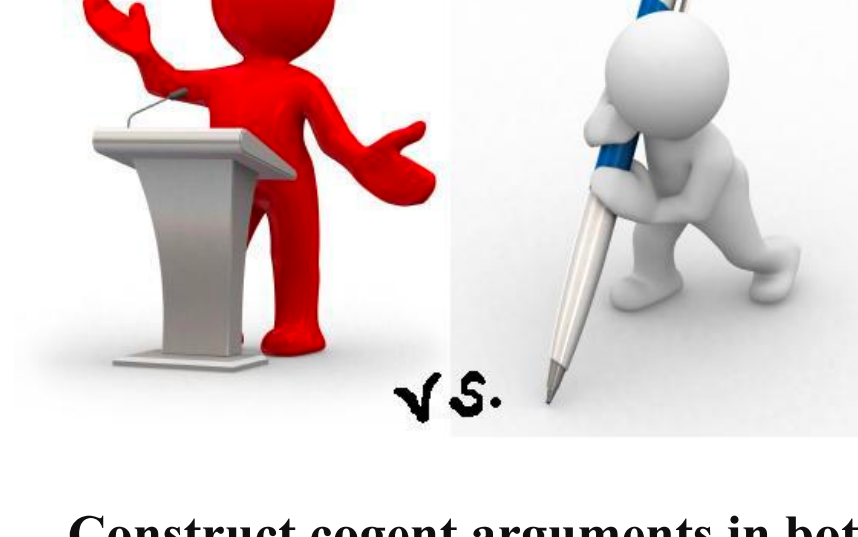
Learn to critically read increasingly sophisticated texts



Learn to pose and respond to complex ideas

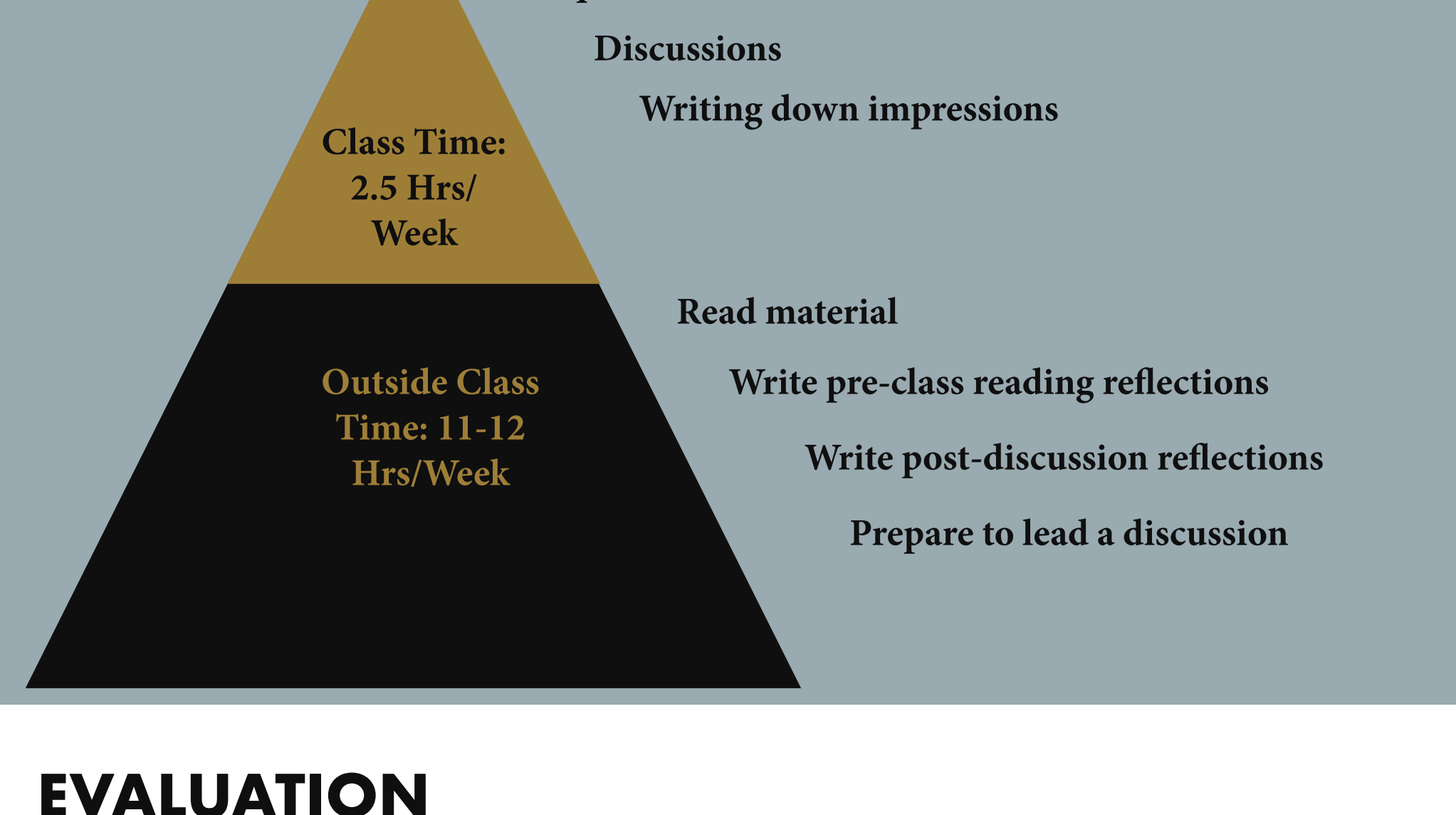


Learn to identify, analyze, interpret and evaluate different points of view



Construct cogent arguments in both written and oral form

CLASS STRUCTURE



EVALUATION

The course will primarily consist of interactive student lead discussions in which we will all reflect on assigned readings. This format is intentional as the instructor is not an expert in all of the topics that will be discussed. Instead, the goal is to learn from the readings, our personal experiences, and through our own reflections. To facilitate these discussions, students' progress will be assessed through a number of written and oral assignments (see below). You are guaranteed the following grades if your final percentage fall within the range in the following table:

90-92.9: A-	93-100: A	
80-82.9: B-	83-86.9: B	87-89.9: B+
70-72.9: C-	73-76.9: C	77-79.9: C+
60-62.9: D-	63-66.9: D	67-69.9: D+

Leading a Discussion (10%)
Structured leading of an in class discussion
Grades based on preparation

Pre-class reading reflections (20%)
Handwritten in journals
Graded on completion

Post discussion reflections (20%)
Approximately 1 page essay
Graded on completion

Participation (20%)
Graded on participation in discussion

Small group final project (30%)
Graded using a publicly available rubric

In Class Discussion: We will use the class meetings to discuss the materials we read. I will ask one or two students to lead a discussion and to help plan the guiding questions that we will use to structure the meeting and to facilitate the discussion.

Pre-Class Reading Reflections: Students will keep a journal in which before each class they will write reflections on their initial thoughts about assigned readings. The instructor will provide a brief list of questions that will guide students through the reading and allow them to structure their reading. In the journal students will respond to the questions by defining some of the concepts and terms encountered in the reading, reflect on the guiding questions the instructor posed, and formulate additional questions that you would like to discuss and focus on during class. Student journals will be collected before class and graded on completion. The journal can be a physical book or a Google Document, whatever the student prefers. Grades will be based on completion.

Post-Discussion Summary Reflections: At the end of most weeks each week students will write a post-discussion essay (approximately 1-2 pages) in which they reflect on the reading and in-class discussions. Students will provide concise responses to the questions that guided us through the discussion and reflect critically on the reading materials (including questioning the methodologies used and assessing the validity of the conclusions drawn in the research papers). Students will also reflect on their own learning by addressing the following questions:

1. Have I gained a better understanding of the topic through the reading and discussion?
2. Have I broadened my thinking or generated new thoughts or ideas not previously formulated?
3. Have I helped my peers clarify their thinking and in doing so clarified my own thinking?

Grades will be based on completion.

Participation: At the end of each class, we will spend approximately five writing down brief impressions of our discussions in our journals which I will collect and grade on completion.

Final Group Project: In the final project students will engage closely with a topic related to the class material, for example by exploring topics in more depth, pursuing outreach activities to campus communities on STEM-related issues, advocating for specific changes in STEM advising or courses at Wake Forest based on our readings and discussions, or develop fact sheets for faculty or students. The final project will be assessed based on the following:

1. **Project Essay:** The aim of the project essay is to provide a record of your work on the topic you selected. The essay should be 5-10 pages and explain the goal of your project and the rationale behind it, present in detail your main findings and outcomes, and provide a thorough discussion of the work that led to your main findings or outcomes. The essay can be accompanied by additional materials if they are part of your outcomes.
2. **Project Presentation:** The aim of the final presentations is to communicate your main findings and outcomes to others in the class and possibly across Wake Forest. The final product for your presentation could be a poster that outlines your main conclusions and outcomes and summarizes the rationale behind them, a video or art object with a description of the work you did, or a podcast.

If you need to miss class due to a university sponsored activity, such as athletics. Please contact the faculty member as soon as possible to reschedule due dates.

COURSE ENVIRONMENT

Names/Pronouns



You **deserve** to be addressed in the manner you prefer. To guarantee that I address you properly, you are welcome to tell me your pronoun(s) and/or preferred name at any time, either in person or via email.

Diversity



We embrace diversity of age, background, beliefs, ethnicity, gender, gender identity, gender expression, national origin, religious affiliation, sexual orientation, and other visible and non-visible categories. **I do not tolerate discrimination.**

Accessibility



I want you to succeed in this course. Wake Forest University provides reasonable accommodations to students with disabilities. If you are in need of an accommodation, then please contact me privately as early in the term as possible. Retroactive accommodations may not be provided. Students requiring accommodations must also consult the Center for Learning, Access, and Student Success(118 Reynolda Hall, 336-758-5929, <http://class.wfu.edu>). For personal issues, stress, health problems or life circumstances see shs.wfu.edu/. Contact me if you have other special circumstances. **I will find resources for you.**

Title IX



You **deserve** a community free from discrimination, sexual harassment, a hostile environment, sexual assault, domestic violence, dating violence, and stalking. If you experience or know of a Title IX violation, you have many options for support and/or reporting; see titleix.wfu.edu/.

Emergency Fund



You **deserve** a learning environment in which all of your physiological and safety needs are met. If you are experiencing situations in which these needs are not met, e.g. you do not have adequate housing or sufficient food security, the Chaplain's Office has an emergency fund which can provide support: <https://chaplain.wfu.edu/care-support/chaplains-emergency-fund/>. In situations in which you need immediate assistance there is emergency funding available through the Department of Mathematics and Statistics. If you are in need of emergency help you are encouraged to reach out to a faculty member in the Department of Mathematics and Statistics who will work with the chair of the department to address your needs.

Course Resources



The department has a limited amount of funding for class materials. If you cannot afford class materials, you are encouraged to contact the chair of the department privately as early in the term as possible. Due to the limited amount of funds, students must exhaust all other sources of funding before applying to the department for assistance.

The Honor Code



At Wake Forest, we expect you to behave as honorable citizens of the class, the university, and the world as a whole. When you complete an assignment with your name on it, you are representing that everything you are turning in is your own work. That means that you do not copy from other students, textbooks, or websites. If at any time I become aware of cheating or plagiarism in this course, I will submit the information to the honor council.

TENTATIVE COURSE CALENDAR

- Week 1 (1/09-1/13): Introduction to the Course and Safe Spaces
- Week 2 (1/16-1/20): Race and Gender
- Week 3 (1/23-1/27): Underrepresented Minorities
- Week 4 (1/30-2/03): Philosophy of Science and Scientific Objectivity
- Week 5 (2/06-2/10): Feminist Philosophy of Science
- Week 6 (2/13-2/17): How Science Developed
- Week 7 (2/20-2/24): The Scientific Identity Today
- Week 8 (2/27-3/03): Diversity
- **Spring Break**
- Week 9 (3/13-3/17): LGBTQ Science and Scientists
- Week 10 (3/20-3/24): Intersectionality
- Week 11 (3/27-3/31): Stereotype Threat
- Week 12 (4/03-4/07): Teaching
- Week 13 (4/10-4/14): Science Education
- Week 14 (4/17-4/21): Mental Health and Sexual Harassment
- Week 15 (4/24-4/26): Final presentations

There is no final exam, but final essays are due by May 4.