Arguably, “science” is the dominant discourse of our time. Whether we are focused on technology, medicine, the environment, or public policy, science affects all our lives in profound ways, and it does this through writing. This course focuses on understanding how the writing done in science works in a variety of different contexts.

How This Course is Organized

This course is an introduction to the rhetorical, historical and social analysis of science as a discursive and material practice. At least since Descartes in the seventeenth century, science grounded itself on the belief in objectivity and a corresponding belief in the transparency and neutrality of language, what Richard Bernstein calls the “Cartesian Anxiety.” With the rise of postmodern theory and social constructionist positions in the human sciences, this faith in objectivity and a value free, non-rhetorical language has been widely rejected—at least in the humanities. Within rhetorical studies, scientific discourse is now understood as a discursive practice shaped by disciplinary and genre conventions, material conditions, and ideological commitments as well as a disciplined relationship to “external reality.” To argue in a facile way that science is nothing but a social construction usually ignores the fact that science and the scientific method have been extraordinarily powerful and productive. But to take that power and productivity at face value ignores questions of culture, of social power, of material practice, of discursive restrictions and exclusions, of language as the fundamental medium of scientific work. We might ask this as the question of how science “hooks up” with a material world through language and how it authorizes and understands these procedures. Or we might reverse DesCartes positivism and consider science as a remarkably successful, though not perfect, strategy for understanding and managing uncertainty.

The course is organized by four topics:

1) **Defining rhetoric of science.** What are its traditions? What kind of scholarship goes on in the field? And why?

2) **Scientific controversy and disciplinary change.** How do scientific disputes get resolved? How does science change? How do scientific “facts” get established and defended? How does science communicate and cooperate across disciplinary and theoretical difference?

3) **Science as a social, material semiotic.** How can we understand science as a cultural practice? How are science and materiality interconnected in
ways that supersede postmodern critique of language? How might the rhetoric of science intersect with contemporary Science Studies?

4) **Science and Citizenship.** How can rhetorical study help us understand the ways science might or might not participate in social change? How can science affect policy? How can science cooperate with citizens to evaluate technology and manage controversy or crisis? How can rhetoricians participate in the complex work of engaged science?

**Your work**

You have three assignments in this course:

1. **keep up with the reading and participate in class discussion:** As you will see below, there is a lot of reading in the course. Your first, largest, and ongoing responsibility is to keep up with the reading and come to class prepared to discuss it at a fairly detailed level. I will lecture when necessary, but the classes will generally be open discussions of the readings driven by your questions and interests and by my own sense of what’s disciplinarily important. **I do not assign “A”s to students who do not participate substantially and regularly.** Participation is the “jacks or better” to open the betting in the course. And, obviously, if you are not in class, you aren’t participating. Anyone with more than three unexcused absences will be dropped or receive a failing grade for the course.

2. **present an essay or book chapter to the class:** Each of you will facilitate the class discussion of an article or part of a book once during the semester. Typically, this will mean that you prepare and present one of the readings I have put on the syllabus. When you do this, you should do some background work on the author or the topic/issue of the article so you can put the reading in a professional context, and then direct our discussion toward the key points of the article and how it articulates with other things we have read. I have selected readings with a fairly narrow set of interests and issues in mind. And that means that I have overlooked a great many important topics, ideas, and authors whose work may be of interest to some of you. If you want to bring in an essay for discussion that is not on the syllabus, that would be lovely. I don’t anticipate this happening often, but you may have something wonderful you want us all to read. We have very little open space on the schedule, but I’ll make room as necessary. You’ll need to talk with me well ahead of time if you want to bring in a new reading and you’ll need to suggest where in the reading schedule it would logically fall. Also, you’ll need to scan the material and send it to me so I can post it on Blackboard.

3. **complete a writing contract:** I am open to any reasonable proposal for what you write in this course. You should decide what kind of writing best suits your individual scholarly situation and interests. And I encourage you to come talk with me about your interests and your ideas for a course writing project. I want a written
proposal from each of you laying out what you plan to write and why and when I'll get it no later than February 16. The latest date you can turn in written assignments is the day scheduled for the final exam. I encourage you, however, to decide what you want to write and to submit the proposal as early as possible, the sooner, the better. You might, for example, write part of a dissertation or thesis chapter, or part of a dissertation proposal that is in the general field of the rhetoric of science. You might identify an ongoing scientific dispute (e.g. intelligent design, climate change, etc.), gather materials, and analyze the rhetorical activity involved. If the field of rhetoric of science is completely new to you, you might choose to write some form of analytic reading log that synthesizes and organizes your understanding of some of the important theoretical issues we will take up, e.g. incommensurability, hybrids, reference, technoscience, public spheres, science policy. That might be a series of relatively short (5-6 page, double spaced) entries. You might write a review of a new book or books in the area using your class readings as the basis for the review, and then send the review to the appropriate journal. You might use some of the readings in addition to outside reading to develop a thesis of your own or a new position on a controversial topic. You might draft material on a specific case study that lends itself to the material and ideas in the readings. You might even write collaboratively or prepare a hypertext file. Ph.D. students should aim at 15+ pages for a continuous argument; MA Students 10+ pages. Since reading logs are not continuous or new argument, they should be longer (in total). For reading logs Ph.D. students 20+ pages, MA 15+ pages. One Caveat: all papers and logs have to be about the materials and topics in this class.

Your final grade will be determined by your cl participation in the class discussions (and this includes your presentations) and your written work in equal proportions.

**Texts**


**Reading schedule**

**Wed. 1/12: Rhetoric of Science(s) Past and Future**


Wilson, Greg. et. al. “Rhetoric of Science Five Years Out”

(Total pages = approx. 108)

**Wed. 1/19: Philosophical and Rhetorical Positioning: Science as the “Management of Uncertainty”**


(Total pages = 146)

**Wed. 1/26**


(Total pages = 135)
**Wed. 2/2: Controversy and disciplinary (ex)change**

Kuhn *Structure of Scientific Revolutions*: “Introduction” (9) and “Postscript” (34)

Harris. *Rhetoric and Incommensurability* “Introduction” (3-121)

(Total pages = 159)

**Wed. 2/9**


(Total pages = 140)

**Wed. 2/16**


(Total pages = 136)

**Wed. 2/23: Science as Material Semiotic (Resilient Tampa Bay Conference)**


(Total pages = 144)

**Wed. 3/2**


(Row text continues...)


Wed. 4/27

(Total pages = 148)