This course will explore a variety of connected questions about the relation between science and values: Is science a value-free inquiry? Can it help us pursue questions about values themselves? What ethical constraints should we place on science? How should a democratic society go about choosing what projects to embark on and how to prioritize existing projects? How should considerations of equality and social (global) justice constrain scientific research?

The first part of the course will be devoted to answering two difficult questions: (1) What are values and how do they serve as reasons for and constraints on action? and (2) What role do values play in science? Our answers to these questions will then inform our approach to questions about particular ethical questions in science (e.g., concerning human and animal research, genetic engineering, research ethics and peer review) and general social questions about how we ought to decide on which scientific projects to pursue. The last part of the course will be devoted to significant group presentations. Your group will, in effect, direct one of our last few meetings, deciding (in consultation with me) on a topic to pursue and readings to assign.

Requirements & Assessment

**Participation and Preparation (15%).** Learning is, ideally, both a private and public business. Much of what you’ll learn in this course will be from what you read on your own. Read little and you’ll learn little — I guarantee it. Not only do I expect you to pass your eyes over these readings, but I expect you to make a serious effort to digest them. This will, I guarantee you, take multiple read-throughs. If you don’t understand something — and there’ll be plenty you won’t — it is your responsibility to bring that up in class so we can get some more clarity. I suggest keeping a reading journal in which you jot down points or questions to bring up in class.

Class will be run primarily as a seminar. My method is semi-Socratic: don’t be surprised if I simply call on you to provide a quick summary of a topic or ask for your take on an issue. It will thus be apparent who has read carefully and who hasn’t. When I lecture (which will be rare), you should absolutely feel free to stop me with questions, objections, clarifications, whatever. If you’re thinking it, chances are others are as well; please don’t let me prattle on if I’m making no sense.

**Attendance Policy.** Simple: You should come to every class meeting (especially for a one-a-week class). In addition to hurting your participation grade for failing to come to class, there will be a specific grade penalty. After one unexcused absence, each further absence will reduce your final course grade by three percentage points; **more than five unexcused absences will be an automatic failure** (you can’t miss a whole third of a course and expect to pass — this is not a “skills course”). If you must miss a class (and I’ll interpret the meaning of ‘must’), you should contact me before the class in question, unless circumstances make this impossible for some strange reason (I’ll interpret ‘impossible’ as well!). Post-hoc excuses will rarely be accepted. I’m serious about this: I’ve failed otherwise good students before for missing too much class.

**Further Research and Blog Postings (20%).** I have established a “blog” for the course on which most of the course business will be conducted (see address above left). You’ll be contributing to this blog on a regular basis by authoring posts and commenting on others’ posts. The reading I assign is the tip of the iceberg. We’re dealing with topics and issues that are constantly under public discussion — both in academia and in the popular press. I’d like to see you do your part to bring some of this material to the rest of the class’s attention. Moreover, I expect everyone to be reading the blog. Note that others might be reading it as well — this blog is a public, collectively-authored document of which I want us to be proud!

Here’s how I’ll evaluate your contributions: We have around fourteen weeks: I expect you to put/comment significantly on at least eight different topics, in eight different weeks. After each class, I will evaluate your posts for the week on a 0–4 basis (0= “not done”/“wildly insufficient”, 1= “needs improvement”, 2= “acceptable”, 3= “good”, 4= “excellent”). At the end of the term, I’ll ask you to submit a “best of” portfolio of your posts and will assign a grade on the basis of this and your numerical scores.

**Short Essay (15%).** Your first essay will be on a topic of your choosing (so long as I approve) and will be due whenever you choose, but before we begin the group projects. For instance, if you discover an interest in animal research that you’d like to pursue, we’d talk about it and you’d write your essay right then while the topic was still fresh. I will allow you one rewrite (your best score will be kept) — but any rewrites must be completed before the presentations start. The essay should be around 1,800–2,400 words long.

**Group Presentation (30%).** We’ll talk about the details the presentations as the time approaches, but I will be evaluating these on the basis of a number of different criteria, including preparation, delivery, success/interest, and depth of research. I expect these projects to be fully collaborative, but if they turn out not to be, I reserve the right to award different grades to members of the same group in light of different levels of contribution.

**Final Essay (20%).** As with your first essay, your final essay will be on a topic of your choosing, though that topic should dovetail reasonably closely with that of your group presentation. You could think of it as an expansion of your contribution to this project if you wish, or perhaps a chance to explore your group’s topic from another angle. Once again, we’ll be talking about these essays on an individual basis. They should be between 2,400 and 4,000 words and involve a significant amount of independent research.

I have high expectations of you: that you read every thing carefully, that you actively engage with the discussion, that you stringently observe a no-bullshit-policy, and that you complete work on time. But you should have high expectations of me as well. I
am very often available outside of class to help you understand course material. I’m happy to read drafts, discuss questions/issues, and help you sort out your thoughts as best I can. If I’m in my office and distractable (as I often am), I’ll try to set my IM status to “Available” (my IM handle is ‘mslater@uidaho.edu’)

Texts
The interests of trees and learning often conflict: The majority of the readings will be made available on the blackboard website as PDFs. You may need to buy extra printing pages — think of this as part of your book budget. Given the amount of time we’ll focus on nuances of these texts, it’s imperative that you bring them to class (so mehow: either print them out or view them on a laptop). If you print these, I recommend learning how to double-side them and print 2-up (it’s an Acrobat setting somewhere). We’ll also read two books: Philip Kitcher’s Science, Truth, and Democracy and Bernard Rollins’ Science and Ethics.

Rough Schedule of Topics
This is just to give you an idea of what we’ll be talking about when. Full assignments will appear on the course blog in due course (which is required reading, remember).

### Research Ethics

1. **Administrivia and introduction** 1/20
   - Approaches to Ethics
2. **Research on human subjects** 1/27
   - Rollin, Chapters 1–4
   - Case Study: The Tuskegee Experiments
3. **Research on humans and animals** 2/3
   - Rollin, Chapter 5
   - Webster, “Biology and Animals”
4. **Fraud, conflict, optimism, and peer-review** 2/10
   - Webster, “Research Ethics” [PDF]
   - Case Study: Cold Fusion
5. **Justice and Health** 2/17
   - Benatar, “Justice and Medical Research: A Global Perspective”
   - Pogge, “Responsibilities for Poverty-Related Ill Health”
   - Brock, “Priority to the Worse Off in Health-Care Resource Prioritization”
   - Case Study: AIDS, Tuberculosis, and Malaria

### Values in and from science

6. **What can science tell us about values?** 2/24
   - Early Modern Sources: Hobbes, Descartes, and Hume
7. **Is Science Value-Free? (Part I)** 3/3
   - Godfrey-Smith, “The Challenge from Sociology of Science”
   - Longino, “Values and Objectivity” (Chapter 4 of *Science as Social Knowledge*)
8. **Is Science Value-Free? (Part II)** 3/10
   - Kitcher, *Science, Truth, and Democracy*, Chs 1–6

### Research Priorities

9. **Well-Ordered Science** 3/24
10. **Scientific Literacy and Elitism** 3/31
    - Slater, “How to Justify Teaching False Science”

   No Meeting: Matthew at the Pacific APA 4/7

11. **Private versus Public Science** 4/14
    - Kitcher-Longino Symposium in PSA
    - Stevenson and Byerly, “Science and Money”

### Group Research Presentations

Meetings 12, 13, 14. 4/21, 4/28, 5/5

**Topic Suggestions:** (don’t hesitate to offer something else)
- Global climate change
- Genetic engineering, the Human Genome Project
- Stem cell research
- Xenotransplanation
- Prioritization of pure versus applied science
- Science funding
- Risk and uncertainty

*Spring Break* 3/16–20