

University of California, Davis
Department of Philosophy
PHILOSOPHY OF SCIENCE
PHI 210, Winter 2016
2275 SSH, Tues 3:10-6 PM

Contact information

Instructor: Professor Roberta Millstein

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Office Hours: Tues 12:30-1:30 PM, Thurs 3-4 PM, and by appointment

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Required readings

Required (and optional) readings available on course website on SmartSite, <https://smartsite.ucdavis.edu/>

Course description

This graduate seminar will explore the topic of *values in science*. Traditionally, science was seen as a “value free” endeavor, at least when it came to social, political, and ethical values; this view is still held by many scientists today. However, in the last few decades, it has come under attack by many philosophers of science, particularly feminist philosophers of science. Loosely following a framework laid out by Heather Douglas in a recent essay, we will first examine various challenges to the value-free ideal (see “Tentative Schedule” on next page). We will then take a more positive turn and examine arguments that seek to defend proper (and improper) roles for values in science.

Course requirements

Your grade will be based on the following:

10% - In-class participation

10% - Online participation

20% - Coordination of seminars

60% - Term paper - Sketch due by 11 PM Sun, **Mar. 6**; final version due by 11 PM on Sun, **Mar. 20**.

In-class participation - You are expected to come to all classes having done the readings and you are expected to participate in class discussions.

Online participation - Post to the SmartSite Forums **by 1 PM before every seminar** concerning the readings for the day – ask questions, raise objections, give reflections, etc.

Coordination of seminars: You will coordinate at least one (perhaps more, depending on the number of students in the class) seminar using a visual aid such as handout or PowerPoint-type slides – contact me before class for help with photocopying or projector set up. Your job as coordinator is to stimulate and lead discussion. So, you should **1)** Give enough of a summary of the readings to stimulate discussion, but don’t attempt a point-by-point summary (we can always turn to the article during discussion if necessary). Be sure to provide an overview of the overall argument. Seek out additional references if necessary. And, **2)** raise issues for discussion (not simply, “what did you think about that?”). As coordinator, it is OK if there are parts of the articles that you didn’t understand; ask those questions for group discussion.

Term paper: Your paper may analyze any of the readings discussed in class, any of the optional readings, or offshoots of those readings (follow the citations of class readings or look for papers that cite the class readings). Contact me if you wish to do something other than the above. Prepare your paper (more or less) in the style of a *Philosophy of Science* article. Your paper should be approximately 5000 words (the length of a Philosophy of Science Association conference paper).

Important note on plagiarism/cheating: It is a violation of the Code of Academic Conduct to turn in work that is not your own. This includes: turning in the work of another student with your name on it, buying/copying a paper off the Internet, using the words *or* ideas of others without proper quotation and citation. In accordance with Regulation 550 of the Davis Division of the Academic Senate, **a grade of "0" will be assigned to assignments on which cheating, plagiarism or any other form of academic dishonesty is admitted or determined to have occurred by proper adjudication.** If you have trouble with the class material or have personal issues that prevent you from doing your work, come talk to me.

Tentative Schedule - All dates and readings are subject to change.

Date	Author-year	Paper/chapter title	Coor.
Jan 5		<i>The so-called "value-free ideal" and the descriptive challenge</i>	RLM
	Kuhn 1977	"Objectivity, Value Judgment, and Theory Choice,"	RLM
	Longino 1983	"Beyond 'Bad Science'"	
Jan 12		<i>The underdetermination challenge</i>	
	Longino 1979	"Evidence and Hypothesis"	
	Intemann 2005	"Feminism, Underdetermination, and Values in Science"	
Jan 19		<i>The boundary challenge</i>	
	Rooney 1992	"On Values in Science: Is the Epistemic/Non-Epistemic Distinction Useful?"	
	Longino 1996	"Cognitive and Non-Cognitive Values in Science"	
Jan 26		<i>The language challenge</i>	
	Dupré 2007	"Fact and Value"	
	Elliott 2009	"The Ethical Significance of Language in the Environmental Sciences"	
Feb 2		<i>The normative challenge</i>	
	Douglas 2000	"Inductive Risk and Values in Science"	
	Betz 2013	"In defence of the value free ideal"	
Feb 9		<i>Re-thinking Epistemic Values in Science</i>	
	Steel 2010	"Epistemic Values and the Argument from Inductive Risk"	
	Douglas 2013	"The Value of Cognitive Values"	
Feb 16		<i>Distinguishing Roles for Values in Science</i>	
	Douglas 2009	"The Structure of Values in Science"	
	Elliott 2011	"Direct and Indirect Roles for Values in Science"	
Feb 23		<i>Distinguishing Roles for Values in Science, cont.</i>	
	Anderson 2004	"Uses of Value Judgments in Science"	
	Brown 2013a	"Values in Science beyond Underdetermination and Inductive Risk"	
Mar 1		<i>Arguing for the Right Values in Science</i>	
	Kourany 2010	"What Feminist Science Studies Can Offer"	
	Solomon 2012	"Socially Responsible Science and the Unity of Values"	
Mar 8		<i>Arguing for the Right Values in Science, cont.</i>	
	Brown 2013b	"The source and status of values for socially responsible science"	
	Hicks 2014	"A New Direction for Science and Values"	