

# PHIL 5800-301

The epistemology of scientific institutions

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Location TBA

T / 3:30-6:29 pm

## Course Description

Philosophy of science has always asked “How does science work?” and almost always gone on to ignore the things that actually make science work:

- Sources of funding
- How scientists communicate their results
- The institutions where scientists work
- Interfaces between science, policy, and industry
- The relationship between science and engineering

This class covers an emerging literature that tackles the social institutions that support and govern science, and explores how these institutions play a role in the epistemology and politics of science

This course is an exercise in co-design. As such, all participants will collaborate in crafting a dynamic syllabus.

## Objectives

The purpose of a grad-level seminar is for students to carry out original research in a mentored setting.

Accordingly, the main goal is for participants to produce a research product that could be shared in appropriate scientific and/or philosophical venues, such as conferences or journals.

Secondary objectives are to develop the prerequisites for accomplishing the main goal: (a) familiarity with the relevant contemporary literatures, and (b) facility with academic writing

## Texts

Textbooks are a scam.

There is no required textbook for this course.  
All readings will be posted to Canvas.

## Evaluation:

Grade breakdown will run as follows:

Assignment 1—20%

Assignment 2—20%

Assignment 3—30%

Weekly responses—15%

Participation—15%

## Participation:

Every participant in the seminar is responsible for contributing to its success. As such, you're expected to show up consistently, having done the reading and assignments, and be willing to contribute your ideas.

Please get in touch with me if you are having difficulty engaging with the course material or have reservations about active in-person participation.

## Assignments:

Full details on each assignment will be given well in advance.

Weekly responses—1 page single-spaced structured responses to the week's readings

Assignment 1—Project prospectus

I have high standards, so you'll need to get started early if you want to succeed on your research paper. Assignment 1 will force you to do so, and give you a chance to get input on your project from other participants.

Assignment 2—Engagement project

You'll participate in, or interview a participant in, one of the scientific institutions we discuss, and provide a short writeup summarizing your findings.

Assignment 3—Research paper

An original research paper. An 'A' paper will be ready to be presented at a conference, and would be publishable with moderate revisions.

## Flexibility:

The schedule and assignment structure aren't fixed, and we'll craft it together as we go along.

## Honesty:

You are encouraged to use any available resources, including your peers, to understand readings and prepare for assignments, but submitted work must be your own, and follow appropriate citation practices.

It is your responsibility to be familiar with university policy on academic honesty.

## Environment:

I aim to make our classroom a safe, welcoming environment for you, and require that you do the same for your peers. While disagreement and debate is encouraged, I have zero-tolerance for hostility, aggression, or harassment.

Student life can be challenging and stressful, and for some of you that will include participating in this course. I encourage you to chat with me if you begin to feel overwhelmed by this course.

## Support:

If you need academic support or disability services, please contact the Weingarten Center at 215-573-9235, located at 3702 Spruce Street, Suite 300.

For accommodations not in the purview of the Weingarten Center (e.g. personal crisis, acute health event), I'm happy to work with you, and I don't need to know the details. Please get in touch as far in advance as possible so we can design a solution together that's both fair and works for your situation.

## Meetings with me:

I meet by appointment rather than holding regular office hours. If you request an appointment, I'll find time for you within the week, barring extraordinary circumstances.

I'm happy to discuss course-related topics as well as other academic stuff.

# Tentative Schedule

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## **Week 1: A genealogy of scientific institutions**

The case of the Royal Society (no readings)

## **Week 2: The social contract for science**

Branch and Douglas—The social contract for science

Bush—Selections from “Science, the Endless Frontier”

Guston—The example of “Science, the Endless Frontier”

## **Week 3 and onward:**

To be determined collectively by participants