

PHIL 3115 Syllabus

Philosophy of Science Phil 3115, All Sections, 3 Credits

Fall 2026

Instructor Information

Instructor: Abigail Mills

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General Course Information

Description

In this course, we will discuss issues that arise from philosophical reflection on the practice of science. In particular, we will develop an understanding of four key questions:

1. What is science, and what separates it from non-science?
2. Is scientific reasoning reliable, and why (not)?
3. Should we believe that our best scientific theories describe the world as it really is?
4. What is the appropriate role for values (such as feminism, justice, equality, etc) in science, if any?

We will connect our answers to these questions with current, relevant issues in public life, wherever possible.

Course Learning Outcomes

Students will be able to:

1. Demonstrate an improved understanding of key issues in the philosophy of science.
2. Understand how issues in the philosophy of science relate to other disciplines, as well as to important debates in politics and daily life.
3. Develop one's intellectual virtues, as demonstrated by personal reflection.

Required Course Materials

Students must gain access to the following texts:

Peter Godfrey-Smith, 2003, *Theory and Reality*. University of Chicago Press.

Hasok Chang, 2004, *Inventing Temperature*. Oxford University Press.

Grading Policy:

You will earn letter grades as follows:

- A 90+%
- B 80-89%
- C 70-79%
- D 60-69%
- F Below 60%

You will earn points according to the following distribution:

- Reading Quizzes 20%
- Tests (2) 40%
- Class Work 40%

Description of Graded Components

Reading Quizzes: Simple pop quizzes will be given at random to assess whether or not readings were completed prior to class. The two lowest scoring pop quizzes will be dropped.

Tests: There will be two tests taken during class. They will be handwritten. No notes may be used.

Class work: Several class periods (10 or fewer) will be dedicated to class projects or discussions. These may require preparation, such as a reading or viewing. Your attendance and participation during these periods will be graded. The two lowest scoring class work days will be dropped.

Course Policies

Attendance and Participation

Missed class work and tests can be made up with a valid excuse, which will be granted in the case of illness or emergency documented through OSL, Institute Approved Absence, official accommodation, or pre-arranged religious obligation.

Accommodations, illnesses, or other conflicts must be documented through the appropriate University channels. Make-ups must be arranged promptly.

AI Use

AI, including large language models, may not be used for any purpose in this course. Using AI will be counted as a form of plagiarism.

Late Work

No late work is permitted except in the case of illness or emergency documented through OSL, Institute Approved Absence, official accommodation, or pre-arranged religious obligation.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. [The Student-Faculty Expectations](#) articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.