Science & Society¹ PHIL 3310-001 Fall 2021 Tues/Thurs 12:25-1:45pm SAEC 2151

INSTRUCTOR

TJ Perkins t.perkins@utah.edu

OFFICE HOURS

Tuesdays 2:00-3:00, also by appointment. Room CTIHB 405 (Philosophy Department)

COURSE DESCRIPTION

Science and society are intricately linked. Many of our personal and/or societal decisions about, e.g., health, policy, and lifestyle are at least partially informed by the latest scientific findings. Conversely, science is influenced by the broader society at large, as human-interest drives, e.g., funding for research in various fields. We will consider two ways of viewing science and society. First, is the sense in which science and society, at least on their face, seem like distinct, interrelated things. Second, we can treat science as a kind of social enterprise itself, with its own norms and values. We will ask and address questions like,

What is science?

How has science seen itself?

Are science and society distinct things?

To answer these questions, we will examine cases from the history of (and some modern) science and consult the views of scientists and philosophers of science.

OUTCOMES

Students in this course can expect to develop their own, rigorous answers to the above questions. They can also expect to:

- 1. Develop and extend pre-existing skills in general scholarship—including reading, writing, discussion, and debate.
- 2. Recognize and assess some historical, sociological, and philosophical methods.
- 3. Argumentatively parse and defend not just descriptive but also normative claims.

COURSE REQUIREMENTS

Students will be graded on four kinds of assignment.

<u>Participation</u>: Students can fulfill the participation grade in a few ways: contribute to discussions in class, come to office hours to discuss course materials, meet with me about

¹ Much of this syllabus, including content and pedagogy, has been adopted from Joyce Havstad's 2021 PHIL 5350 syllabus, Steve Downes's 1998, 2000 PHIL 1310 syllabi, and Robert Kok's 2021 PHIL 3310 syllabus.

the Science and Society Paper Project, get discussions going/contribute to the discussion boards on Canvas.

Reading Reflections: By 12pm the day we discuss a particular reading, you may submit a full one-page (double-spaced, 12-point font) reflection on themes and argumentation made in the reading. You must submit a minimum of 10 such reflections and may submit more than ten (of which the 10 best scores will be kept). Keep track of these, as I do not have a required amount by a certain date. These can be used to guide discussion when desired.

<u>Take-home Mid-term</u>: A series of questions will be provided to students at least two weeks in advance of the due date. Students will provide a response to the questions. <u>Science and Society Paper Project</u>: Students will write a 4-6 page (double-spaced, 12-point font) paper using a case study from science of your own choosing to tell a story about the interrelation of science and society. Think of this paper as a blog post for a scientifically interested audience.

ASSESSMENT

Participation (20%) 10x Reading Reflections (30%) Take-home Mid-term (25%) Science and Society Paper Project (25%)

GRADES

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The overall grade scale for the
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course is as follows:

100–94% = A (4.0) 93–90% = A- (3.7) 89–87% = B+ (3.3) 86–84% = B (3.0) 83–80% = B- (2.7) 79–77% = C+ (2.3) 76–74% = C (2.0) 73–70% = C- (1.7) 69–67% = D+ (1.3) 66–64% = D (1.0) 63–60% = D- (0.7) 59–0% = E (0.0)

A/A- "excellent performance, superior achievement"
B+/B/B- "good performance, substantial achievement"
C+/C/C- "standard performance and achievement"

D+/D/D- "substandard performance, marginal achievement" **E** "unsatisfactory performance and achievement"

Quotes from section III.G.1 of *Policy 6–100 Instruction and Evaluation* Revision 25 (effective July 1, 2017).

Schedule of Topics²

Unit 1: What is Science?

What is Science?

Week 1 Aug 24,26 Syllabus and Brenner (1996)

Week 2 Aug 31, Sept 2 Chapter 1&2 of Stevenson and Byerly (2001)

Week 3 Sept 7, 9 LOGIC Week

Philosophy of Science and Scientific Reasoning

Week 4 Sept 14, 16

Week 5 Sept, 21, 23

Unit 2: How Has Science Seen Itself?

Norms and Ethos of Science

Week 6 Sept 28, 30

Week 7 Oct 5, 7

Week 8 FALL BREAK (No classes)

Value-free Ideal

Week 9 Oct 19, 21

Week 10 Oct 26, 28 (Mid-term Due)

<u>Unit 3: How Distinct are Science and Society? Issues in the Paleontology and Related Sciences</u>

Week 11 Nov 2, 4

Week 12 Nov 9, 11

Week 13 Nov 16, 18

Week 14 Nov 23, THANKSGIVING BREAK Nov 25-28 (No Classes)

Week 15 Nov 30, Dec 2

² As you can see this schedule is non-specific as far as readings are concerned. The readings will be provided as we proceed through the course. That said, this schedule is tentative and may change based upon the pace of the course.

Wrap-up

Week 16 Dec 7, 9 (Last day of Classes) Science and Society Paper Project Due

ACADEMIC MISCONDUCT

While scholastic dishonesty is not anticipated, students are subject to university policy governing these matters. Students are encouraged to familiarize themselves with *Policy 6-400 Code of Student Rights and Responsibilities*. Ignorance of the policy is not considered an excuse. This means that neither cheating nor plagiarism is allowed in this course. Among other things: no copying from others, and no borrowing from others without proper attribution when completing written assignments. The work you submit in this class must be original work created for this class.

Here is an informal tip on how to avoid any question of plagiarism during paper writing: whenever you borrow an idea from someone else, make sure to credit that person in parentheses after the sentence or paragraph you wrote using that idea; whenever you borrow words from someone else, make sure to put those words in quotation marks and to credit that person in parentheses after the quote. Any sources used for their ideas or words must be cited using some sort of professional citation method (like APA, MLA, or Chicago style).

Failure to abide by these norms will be reported to the Dean of Students. Academic sanctions may result, including but not limited to: grade reduction; failing grade; probation; suspension or dismissal from the program or the university; and even revocation of certificate or degree.

COMMUNICATION

The professor is extremely available during office hours. You are encouraged to "drop in" during these "walk-in" times—no appointment is necessary. Come to ask questions about the course, or just to chat about an idea you had while doing the reading or thinking about the material. If the scheduled time does not work for you, request an alternative.

The instructor is generally accessible via email, but cannot guarantee immediate response. In case of emergency, the professor will always attend to correspondence as promptly as possible. But during an emergency, please do not worry about obtaining permission from the professor to turn an assignment in late. Simply plan on obtaining documentation, once the crisis has passed—such as a doctor's note, incident report, obituary, etc. If you supply that documentation, your personal emergency will be accommodated, and your coursework will

be available for make-up until the end of the final day of the course. Once grades are in, they are final.

Following federal guidelines (FERPA), grades will never be discussed over email. Grade changes can be requested, though grades may decrease rather than increase upon re-evaluation by the professor. University add/drop policy will be followed.

CLASSROOM BEHAVIOR

You can expect the professor to ask for your name prior to addressing you in class. The professor also avoids biased, expectant, and slanted language whenever possible. Considerate and respectful behavior is generally expected of everyone. In the unfortunate case of extremely uncharitable.

In the unfortunate case of extremely uncharitable or highly disruptive student behavior, the professor reserves the right to incorporate this behavior into determination of a student's overall grade. Note the professor has never needed to invoke this right.

MATERIAL

There are no books to buy for this class—all readings are available as PDFs on the course Canvas. Please visit the Canvas for this, and more; and just let the professor know if you need assistance navigating that platform.

OTHER POLICIES AND RESOURCES

VETERANS CENTER

If you are a student veteran, I want you to know that the U of Utah has a Veterans Support Center on campus. They are located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: http://veteranscenter.utah.edu/. Please also let me know if you need any additional support in this class for any reason.

RESOURCE CENTER

If you are a member of the LGBTQ community, I want you to know that my classroom is a safe zone*. Additionally, please know that the U of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Oplin Union Building. Hours: M-F 8-5pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: http://lgbt.utah.edu/. Please also let me know if there is any additional support you need in this class.

LEARNERS OF ENGLISH AS AN ADDITIONAL/SECOND LANGUAGE

If you are an English language learner, please be aware of several resources on campus that will support you with your language development and writing. These resources include: the

Department of Linguistics ESL Program (http://linguistics.utah.edu/esl-program/); the Writing Center (http://writingcenter.utah.edu/); the Writing Program (http://writingprogram. utah.edu/); the English Language Institute (http://continue.utah.edu/eli/). Please let me know if there is any additional support you would like to discuss for this class. ADA The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

NONDISCRIMINATION

The University of Utah does not discriminate on the basis of race, ethnicity, color, religion, national origin, sex, age, disability, sexual orientation, gender identity, gender expression, genetic information or protected veteran's status, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries concerning perceived discrimination or requests for disability accommodations may be referred to the University's Title IX/ADA/Section 504 Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066.

SEXUAL MISCONDUCT/TITLE XI

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585- 2677(COPS).

WELLNESS STATEMENT

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776. University Safety Statement. The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

UNIVERSITY SAFETY STATEMENT

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Philosophy Resources: (helpful for research and getting a better handle on complex issues) Stanford Encyclopedia of Philosophy: https://plato.stanford.edu/ Internet Encyclopedia of Philosophy: https://www.iep.utm.edu/