Overview

This graduate reading and discussion seminar provides an intensive introduction to some of the major themes and issues in the field of Science and Technology Studies (STS). Drawing on scholarship from a range of fields including history, anthropology, sociology, philosophy, communication, and information studies, the course mixes theoretical material with more empirically oriented studies. The course introduces a dozen (or so) core concepts from STS through both classic papers and more recent engagement with those concepts by a wide variety of scholars. The goal is to leave students from all disciplines with a sense of what STS has to offer and how they might concretely implement these concepts in their own work.

Crucial topics (e.g. race, gender, labor, colonialism, medicine, power, the body, &c.) are threaded throughout the syllabus, rather than separated out into their own weeks. This means that, rather than address each one time, we will engage with these topics all semester. While some background in science, technology and/or medicine is helpful, this course does not require any particular expertise. Work for the seminar will include reading a clutch of articles or chapters (and writing a think-piece) every week, leading a class session (alone or with a partner, once or twice, depending on enrollment), active participation in discussions, and a final short paper of 2500-3500 words that you can think of as the core of a future research paper (if you want).

Learning Objectives

- Recognize and explain foundational concepts and vocabulary from STS.
- Apply foundational concepts and vocabulary from STS to your own topical interests.
- Identify and take an informed position on the intellectual debates important to STS.
- Practice scholarly writing and argumentation that either targets the audience of STS scholars or brings ideas from STS to bear in another domain of scholarship.
- Learn to uncover conceptual, theoretical, and political commitments of scholarly texts.
Requirements: Assignments and Expectations

Reading
All required readings will be available for download through the course Canvas site, where any course announcements (as well as your weekly think-pieces) will also be posted.

Grading Breakdown
- Weekly think pieces (10 x 3% each): 30%
- Participation in discussion (14 x 1% each): 14%
- Leading discussion (1 x 20%): 20%
- Final paper (including prep stages): 36%

Assignments
There are three key assignments in the course:

1. **Weekly think piece**: Starting in week 2, every week (except the week in which you co-lead discussion) you must turn in a “think piece,” or response to the readings, of 250 words. Rather than summarize the readings, this piece should engage them synthetically: assess, critique, compare, contrast. The electronic version of this response is due at noon on the day of the seminar, submitted to Canvas in the Discussion section as a post. Think pieces are both a record of your thinking and a spur to discussion. Faculty, student facilitators, and students will have the chance to review others’ posts before class to plan discussion and reflect on their own readings. We will build in ways to engage with the readings from the perspective of our areas of expertise as the course progresses.

   **One free skip**: You can skip one weekly think piece between February and April, no reason needed. No skips in January.

2. **Discussion leading**: Once during the term, you will help lead class discussion together with other students. This is a substantial assignment, as it shapes the way we engage with the week’s readings and provides practice at running a seminar.

   - Meet with the other student(s) presenting in that session and prepare two things:
     - **A one-page handout** as an aid to class discussion. This handout should list what you consider to be the three or four most interesting analytical points for the week’s reading. The handout should also offer several questions designed to provoke interesting, wide-ranging general class discussion. The questions should focus on the concepts, theories, or historiographical frames from the readings.
     - **A 15-minute presentation** outlining the themes from the week’s readings and elaborating your discussion questions. Presentations should draw upon the readings as appropriate, but the goal is not to provide reviews/summaries of those readings. They should instead provide context and impetus for discussion.
   - Feel free to “cheat” and draw on other writing online, such as book reviews, response articles, blog posts, etc., that are relevant. If such material forms a significant aspect of your thinking for the discussion questions, please add it to Canvas / Files.
• Print and distribute hard copies of the handout to all class members at the start of the seminar. This will help focus our attention (away from our screens).
• These presentations can be split up over the course of the seminar time – however you think makes sense for the week’s readings. We will model these in the first week. The key thing is to keep to your time limit—concision is a crucial skill as both a researcher and a teacher, and we want to have enough time to discuss as a group.

3. Final paper: Your final paper should be 2500-3500 words in length (not counting the references). The choice of topic and format is up to you. You may write a literature review, a grant proposal, an analysis of current events, or whatever other format suits your professional training or needs. You must, however, receive approval for the topic and format you choose. Whatever you choose, you must directly engage with some aspect of the STS literature (i.e. with something on the syllabus) and must read additional material (i.e., articles and/or books beyond those assigned in the course). This assignment has three parts:

A. A preliminary proposal that clearly outlines the topic, format, and 7-9 relevant works for your paper will be the object of discussion in the first half of the course (exact date TBA). This is to be sure you are conceptualizing your paper in an appropriate way and to allow us to check in with how your thinking is progressing before work begins in earnest.

B. We will workshop drafts of some sort – outlines, introductions, something that shows the next steps you have taken – with a few weeks to go before the end of class. Again, this is so that we can be sure progress is happening and to give us an opportunity to check in with one another’s work before the end of semester. The exact nature of this check-in will be discussed just after the midway point of the semester (once topics are approved).

C. The final version, edited, revised, and proofread, is due during exam period. Date TBA.

Discussion
This is a discussion seminar. Its success depends on the commitment and involvement of all the participants, us included. You are of course expected to arrive in class on time and thoroughly prepared to participate actively in all discussions. Any necessary absences must be cleared in advance—and think-pieces will still be expected for weeks you are forced to miss.

Grading will depend on both the regularity and the quality of your participation, as outlined in the requirements section above.

This seminar practices the “Guidelines for Dialogue” developed by students and faculty from the University of Michigan Program on Intergroup Relations. That means that we will do our best to:

1. Maintain confidentiality. We want to create an atmosphere for open, honest exchange.
2. Commit to learning from each other. We will listen to other and not talk at each other. We acknowledge differences among us in backgrounds, skills, interests, identities and
values. We realize that it is these very differences that will increase our awareness and understanding through this process.
3. Not demean, devalue, or “put down” people for their experiences, lack of experiences, or difference in interpretation of those experiences.
4. Trust that people are always doing the best they can.
5. We will give each other the benefit of the doubt. We will assume we are all trying our hardest and that our intentions are good even when the impact is not.
6. Challenge the idea and not the person. If we wish to challenge something that has been said, we will challenge the idea or the practice referred to, not the individual sharing this idea or practice.
7. Speak our discomfort. If something is bothering us, we will share this with the group. Often our emotional reactions to this process offer the most valuable learning opportunities.
8. Step Up, Step Back. We will be mindful of taking up much more space than others. On the same note, empower ourselves to speak up when others are dominating the conversation.
9. Not to freeze people in time. We are all works in progress. We will be willing to change and make space for others to do so. Therefore we will not assume that one comment or one opinion made at one time captures the whole of a person's character.

Device Use in Class
Except for those who choose to present with slides (which is not a requirement), or who require them for special accommodation, the use of laptops, smartphones, and other digital devices are discouraged. For the most part, devices should be closed, face down, or turned off during class discussion and student presentations. However, in cases where you need to refer to online readings to contribute to discussion, you are welcome to do so. We both know how necessary and yet how problematic our screens are, and will be attentive to our own behavior as well.

Special Accommodations, Lateness, and Incompletes Policy
If you need special accommodations – e.g., for a disability, for scheduled conflicts, etc. – please let us know in advance. Arrangements will be made, to the extent possible. However, “Incompletes” will only be granted for exceptional circumstances (not as a matter of course).

Science, Technology, Medicine & Society (STeMS) Colloquium Series
Everyone is welcome and encouraged to attend the Science, Technology, Medicine, and Society (STeMS) faculty-graduate student colloquium. STeMS meets a few times each semester, usually on Monday afternoons from 4 to 5:30 in 1014 Tisch Hall. Consult the STS program website for a list of current events. Three semesters of attendance at the STeMS colloquium are required for the STS Graduate Certificate Program. To receive credit toward the certificate, you must register for Rackham 571 (a 1-credit course) each semester. If you are even thinking about the certificate, we recommend you register for 571 and attend the STeMS series this semester.
Other University Policies

Academic Integrity
Unless otherwise specified in an assignment all submitted work must be your own, original work. Any excerpts, statements, or phrases from the work of others must be clearly identified as a quotation, and a proper citation provided. Any violation of university policies on academic integrity will result in serious penalties, which might range from failing an assignment, to failing a course, to being expelled from the degree program.

Mental Health and Wellbeing
The University of Michigan is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and https://caps.umich.edu/ during and after hours, on weekends and holidays, or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (734) 764-8320 and https://www.uhs.umich.edu/mentalhealthsvcs, or for alcohol or drug concerns, see http://www.uhs.umich.edu/aodresources. For a listing of other mental health resources available on and off campus, visit: http://umich.edu/~mhealth/.

Sexual Misconduct
The University of Michigan is committed to fostering a safe, productive learning environment. University policy prohibits discrimination on the basis of sex, which regards sexual misconduct—including harassment, domestic and dating violence, sexual assault, and stalking. Sexual violence can undermine students’ academic success and the university encourages students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. Confidential support and academic advocacy can be found with the Sexual Assault Prevention and Awareness Center (SAPAC) on their 24-hour crisis line, 734-936-3333 and at http://sapac.umich.edu/. Alleged violations can be non-confidentially reported to the Office for Institutional Equity (OIE) at institutional.equity@umich.edu. Reports to law enforcement can be made to University of Michigan Police Department at 734-763-3434.

Schedule

Week 1. 9 January: Origins

Required
Recommended

Week 2. 16 January: Constructions 1 (SSK)

Required

Recommended

Week 3. 23 January: Constructions 2 (SCOT)

Required


**Recommended:**


**Week 4. 30 January: Knowledges**

**Required**


**Recommended**


**Week 5. 6 February: Actants**

**Required**

**Recommended**

**Week 6. 13 February: Boundaries**

**Required**


**Recommended**


**Week 7. 20 February: Infrastructures**

**Required**

- Bowker, Geoffrey C. and Star, Susan Leigh. “Some Tricks of the Trade in Analyzing Classification,” in Sorting Things Out: Classification and Its Consequences, pp. 33-50, Cambridge, MA: MIT Press, 1999. Note: Ch. 1 is required, Ch. 6 is included as it is on the recommended list below.

**Recommended**


Week 8. 27 February: Economies

Required


Recommended


Spring Break. 2-10 March

Week 9. 13 March: Interactions

Required


**Recommended**


**Week 10. 20 March: Epistemologies**

**Required**


**Recommended**


**Week 11. 27 March: Cyborgs**

**Required**


**Recommended**


**Week 12. 3 April: Ontologies**

**Required**


**Recommended**


**Week 13. 10 April: TempoRealities**

**Required**


**Recommended**
Those who are interested should check out pieces collected for an ongoing research collaboration called “Histories of the Future,” available here: [http://histscifi.com/](http://histscifi.com/). Appropriately enough, the future is an emerging area of study and we’ll update recommendations during the term.

**Week 14. 17 April: Biopolitics**

**Required**

**Recommended**

*[Paper Due in Exam Week – 26 April 5pm]*