How does knowledge acquire the status of fact, and how does it travel through the world? What is the relationship between science, technology, and social order? It’s tempting to see new technologies, especially new media technologies, as drivers of political and social change. But technological artifacts also embody the values and assumptions — and conflicts — of the societies that produce them, in complicated and surprising ways. This course provides an introduction to the field of Science & Technology Studies, examining the intersection of technology, knowledge, power, and society, with particular attention to cases and theories relevant to the study of communication and media. It takes as its premise that assumptions about society may come to be embodied in technological artifacts and technical knowledge, and undertakes to study how social relations get “inside” technology. We will read examples of sociological, historical, and ethnographic approaches to the study of knowledge production and its relationship to media and information technologies. This will provide doctoral students with a foundation for analyzing the material and epistemological dimensions of media and communication.

Course objectives:

• achieve a command of foundational literature in Science & Technology Studies, especially as they relate to research in Communication;
• articulate differences and similarities between how STS and Communication scholars approach the study of media technologies, media institutions, technological practices, and technological cultures;
• complete a literature review and propose how this contributes to original research at the intersection of Communication & STS.

COURSE POLICIES:

The most important assignment is to complete all of the reading assigned. Your participation is also crucial to the success of the course. It is the best way to demonstrate what you have been learning as well as to fine-tune your ideas in dialogue with your classmates.

Readings:

Complete the readings before class on the day they are listed on the syllabus.
Journal articles are available through USC library electronic access. Some readings are available online, via a URL provided on the syllabus. The assigned books are recommended for purchase, but are also on reserve at Leavey Library. All other readings will be available as PDFs on the Blackboard site for our course (alphabetical by author last name), and they will be posted no later than one week before the session for which they are assigned.

If readings are not where they seem like they should be, or there is a problem with a reading, please send an email about the problem as soon as you notice it. A logistical problem is not a reason for us to fail to address a reading!!

**Required Books:**


**Recommended Books:**


**Recommended Book Chapters:**


**Attendance:**

This seminar is your class. Our meeting time is a scarce and sacred space for the exploration of the theory and craft of research; we have a limited number of hours together to make a meaningful impact on your doctoral education. Instructors and students alike need to take responsibility for cultivating the seminar experience, including mutual trust, appropriate humility, and respect that will allow for the open exchange of ideas.

It is expected that students will be present (and on time) and prepared for all class meetings, without exception.

Students who observe religious holidays that may conflict with the class schedule should let us know at the beginning of the semester. There is no penalty for missing class due to religious
observance. Given that this is a small seminar, if we will have a critical mass who will be absent on a scheduled course day, we can discuss possibly rescheduling class that day, or else we will accept make-up work for the individual student(s).

Methods of Evaluation:

Weekly memos (20%): Each week, by Tuesday at 7pm, each student will post to Blackboard a short reflective memo (approximately 350-500 words) focused on that week’s readings. Your memo should engage with at least two of the required readings but, beyond that, you have considerable freedom; you might, e.g., pose questions you had as you read; juxtapose readings that you saw in conflict; connect themes you saw among texts; critique authors’ arguments or terminology; reflect upon the methods authors used to develop their arguments. The goal is to reflect upon the readings and share reflections with your classmates so you arrive to class ready to participate. Memos will not be graded but they are required; especially at the beginning of the semester, we’ll provide feedback on whether memos are meeting expectations.

You can skip the weekly memo one week of the semester without affecting your grade. Please email us by 7pm Tuesday to let us know you are taking the pass so there are not crossed wires.

Discussion leader + participation (20%): Each student will sign up to be the discussion leader for three weeks of their choosing. While it is not expected that you will lecture or give a formal presentation, it is expected that you will be well prepared with a series of questions and/or topics, based on the week’s readings, which will serve to provide focus and direction for in-class discussion. You do not need to prepare a PowerPoint™ presentation or something similarly formal. You may wish to bring a written summary/analysis of the readings and a list of questions to distribute, but this is not required.

Project proposal (5%, due March 29): This is a short (2-4 page) proposal for your final project. You will sketch out a research project or a literature review, and a consultation with one of us to discuss the project is strongly encouraged. Not graded but required.

Final project (55%, due May 10): In approximately 5000 words, undertake one of the following:

1. Literature-focused project:

Identify and then examine a sampling of important literature from outside our class on media and information technology (may be around a particular technology or an area of literature). Using the literature from the course, critically evaluate this outside literature. Write a paper in the style of Pinch and Bijker’s “The Social Construction of Facts and Artifacts” or Boczkowski’s and Lievrouw’s “Bridging STS and Communication Studies.” How can the theories of technology we have read in this course inform and improve our study of media and information technologies? What gaps and/or resonances do you encounter between tech studies and the literature you have sampled? How might a study of media and information technologies generate theory about technology more generally? Does a study of these particular technologies point to issues that more general studies of technology can or cannot account for?

This may be written as a literature review or as a research proposal for a specific project.
2. Book review essay project:

Choose a cluster of new books, from this syllabus and/or from elsewhere, and analyze them in a review essay. Make sure the review includes a perspective on the STS-Communication intersections we are exploring in this class. This can be geared towards a review essay publication. If you wish to do this, confer about a journal to approach. *IJOC* would be a sensible target. *Feminist Media Studies* has expressed interest in review essays if you are considering books that address feminism or gender.

3. Artifact/empirically-focused project:

Choose an empirical site and analyze it using appropriate concepts, theories, and methodologies from the literature we have read in the course (and probably other literature identified by you in conversation with us). You may still draw conclusions relevant to answering the questions in option one, but the primary focus should be on using what you have gained from the tech studies literature to provide a critical account of development and use in a particular case. You are encouraged to think of this as the kernel of a conference paper or publication, and thus you are more than welcome to map this to your larger research agenda (dissertation).

**For all options,** cite appropriately and include a bibliography. You are free to use your preferred citation style, but please use it consistently throughout your writing. Type and double-space written work, and number and staple multiple pages.

*NB: Get in the habit of adding page numbers as soon as you start an electronic file. It is always useful for people giving you feedback to have page numbers to refer to, whether on hard copy or electronic file.*

**Human subjects and institutional review:**

If you want to do a paper that involves human subjects, you will need to submit your IRB (Institutional Review Board) application in time to get approval in time to do the research and analysis before the end of the semester. (It takes a few to several weeks to get approval.) Right now, IRB boards often have a very broad understanding of what constitutes a “human subject” online. Because of the lack of standardization about online research in federal regulations on research, IRB wants people doing online research that could even remotely be conceived to involve humans (like online ethnography) at least to submit forms arguing that the research is exempt from oversight.

See: [https://oprs.usc.edu/education/social-behavioral/](https://oprs.usc.edu/education/social-behavioral/) ; [https://oprs.usc.edu/review/](https://oprs.usc.edu/review/)

**Academic integrity:**

Academic integrity is essential to the success of the educational enterprise and breaches of academic integrity constitute serious offenses against the academic community. Every member of that community bears a responsibility for ensuring that the highest standards of academic integrity are upheld. Students who plagiarize will automatically fail the class and it will be at the
instructor’s discretion to report the student to the university. Remember, it is plagiarism if you use someone else’s ideas without attribution or someone else’s words without quotation. If you have any questions as to what constitutes plagiarism or how to properly cite your colleagues or reference resources, confer with instructors and/or turn to these helpful online resources:

USC guide to academic integrity for graduate students: http://www.usc.edu/student-affairs/student-conduct/grad_ai.htm

A useful site about citation and avoiding plagiarism: http://www.lib.berkeley.edu/TeachingLib/Guides/Citations.html

And another about how to think about bibliographies beyond their technical requirements: http://reagle.org/joseph/2007/teaching/bp-bibliography.html

Student resources:

- Dornsife Writing Center: http://dornsife.usc.edu/writingcenter/

- The instructors respect and uphold all university policies with regard to disability, and support efforts to assist students in obtaining appropriate accommodations and services. Students with documented disabilities who wish accommodations in this class must seek assistance and documentation through the USC Disabilities Services and Programs department. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. See https://dsp.usc.edu/ for details.

Students who develop disabling medical problems or other issues during the semester that affect their ability to complete coursework should request advising and/or referral from Anne Marie Campian, campian@usc.edu.

Communication: Make sure to check your USC email regularly, or to have your USC email forwarded to the email you use so you don’t miss any announcements sent over email. You can expect prompt responses to email (within 24-48 hours, more likely to be 48 on weekends).

Grading:

A = Outstanding – excellent, exceptional, superior. Work is comprehensive and integrates themes and concepts from readings and discussions, building an original analysis. Writing is clear, detailed, analytical, and organized. Students who earn this grade are prepared for class, contribute insightfully, synthesize course materials, and develop connections between course themes and their independent research agendas.

B = Good – competent, respectable, solid. References to the course material are complete, well-selected, and topical. Writing is clear and critical analysis is present, but may fall short in its extension beyond course topics to develop independent analysis. Classroom participation is consistent and thoughtful.
C = Satisfactory – adequate, average, acceptable. References to the course material are well-selected and topical, but student performs little or no critical analysis. Problems exist in student's work. Work includes underdeveloped ideas, off-topic sources or examples, inappropriate research, or anecdotes. Work is descriptive, and/or fails to integrate course material into an original analysis. Participation is inadequate or inconsistent.

F = Failing – inadequate, pervasive problems.

IN = incomplete.

**How your grade will be calculated:**

Final assignment: 55%
Project proposal (not graded): 5%
Kick off discussion weeks: 20%
Weekly memos: 20%

**Schedule:**

*The following is a “working schedule.” We may make changes as we move through the semester. Please stay on top of any changes.*

**Week 1: January 10: Course introduction, mechanics**

**Week 2: January 17: Science, epistemography**


**Come prepared to assign yourselves to discussion leader slots.**

**Recommended:**


**Week 3: January 24: What is technology?**


*Recommended:*

**Week 4: January 31: Technological determinism?**


**Week 5: February 7: Social Construction of Technology/Social Shaping of Technology**


Recommended:


Week 6: February 14: Actor-Network Theory


Recommended:

Further reading on ANT:


Further reading on visualization in science:


IRB DEADLINE??

**Week 7: February 21: Expertise and Translation**


Further reading:


**Week 8: February 28: Feminist STS**


Recommended:


**Week 9: March 7: Standards, Infrastructure, Platforms**


Recommended:


**Week 10: March 14: NO CLASS, SPRING BREAK **Think about final projects.**

**Week 11: March 21: Work


**Recommended:**


**Week 12: March 28: Utopianism, Universalism**


*Recommended:*


**FINAL PROJECT PROPOSAL DUE.**

**Week 13: April 4: Periphery-Metropole**


*Recommended:*


**Week 14: April 11: Producing Certainty**


*Recommended:*


**Week 15: April 18: Managing Risk**


*Recommended:*


**Week 16: April 25: High-Tech Inequity**


At least one of:


*Recommended:*

FINAL PAPERS DUE MAY 10 (DISCUSS). Instructions will be given for how to hand them in.