Technology and Society

Last Updated: Mon, 01/05/2026

Course prefix: HTS

Course number: 2084

Section: R

CRN (you may add up to five):
87247

Instructor First Name: Timothy

Instructor Last Name: Stoneman

Semester: Spring

Academic year: 2026

Course description:

Technologies have formed the basis of material culture and influenced the course of social change throughout human history. Yet the shape of technologies' influence on society has varied significantly with time and place in a way that often goes unnoticed by engineering students. The present course
combines the history of technology with world history. While the word "innovation" is modern, creati technical activity, along with changing social practices, is as old as humankind. Through a series of
historical case studies – prehistoric fire, medieval cathedrals, artisanal French bread, railways, and sr phones – we will see how engineering (broadly defined) evolved over major eras of the past. In the process, we address three basic questions concerning technology and society. First, what exactly is technological change – how does it actually occur and how does it differ from the way we talk about the topic? How has its form changed over time? Second, what are the social roots, or origins, of technological change, or "innovation" – what role do different social groups and institutions, as well as various ideas, play in encouraging or inhibiting such change? And, third, what are the social consequences (and costs) of technological change and who benefits from its gains? Put differently, how
should we discuss "progress"? We cannot answer any of these questions in the abstract. Instead, we must address them in specific historical settings, and we do well to go back as far back in time as humanly possible – hence, our case studies.

Course learning outcomes:

Students will accomplish the following objectives:

- Students will deepen their understanding of technological change, including the process of innovation.
- Students will develop a critical perspective on changes in the relationship between technology, culture and society over major periods of human history.
- Students will demonstrate proficiency in the process of articulating and organizing rhetorical arguments in written, oral, visual, and nonverbal modes, using concrete support and conventional language.

Required course materials:

There are no required textbooks
(and associated costs). All reading material will be provided through Canvas. We will utilize Canvas as our website and course management tool. You should see Canvas for all assigned texts.

Grading policy:

I will conduct grading on a point basis according to the following point scheme. Students must work towards accumulating a possible total of 2600 points (2620) through a variety of assignments, including the following: attendance, reading responses, leading class discussion (LCD), in-class group assignments (ICAs), and class debate. (See the table below.) The course has no required tests or final exam. Students must receive 90% of possible points to receive an A.

Assignments –

- *Attendance* - Students are expected to attend all classes and arrive on time. I will register attendance electronically at the start of each class through Roll Call (Canvas). Please let me know in advance if you will miss class – excused absences for medical or other official reasons will not count. Class attendance is strongly encouraged the last day of class, so please plan to attend.
- *Reading responses* – Students will complete short reading responses for class each day summarizing the assigned reading.
- *Leading class discussion* - Everyone will lead class discussion of a daily assigned reading, working with a partner. See Canvas for a detailed description of the assignment as well as grading criteria (i.e., rubric). You will sign up for LCDs on the Collaborations feature of Canvas.
- *In-class assignments* - We will have a series of in-class group assignments, beginning on the first day of class. ICA’s are graded based on completion and must be done the day of class. Students who miss class may make up ICA’s for 50% credit within one week.
- *Field trip responses* - You must complete FTRs from our field trips. See Canvas Assignments for a more detailed description of the assignment. FTR’s are graded on a

completion basis.
- *Debate* - You must participate in a class debate on the question of technological and social progress. You may participate as a team debater or judge. In-person attendance for the debate is required – otherwise there is a - 25% (75 pts.) penalty.

You must complete an LCD and the debate. Failure to meet requirements will result in subtraction of double the missing points from your overall point total.

General - I will accept late work for one week for 50% credit; excused work with an Institute-approved absence will receive full credit. After one week, no late work will be accepted except under extraordinary circumstances. There will not be any opportunity for revisions or extra credit. All assignments should be turned in through Canvas, including late work.

Calculating your grade - Students can calculate their point totals each week by consulting the weekly totals on Canvas gradebook (i.e., Week 1, Week 2, Week 3, etc.). To see your raw weekly point totals, simply click on the Week 1 total on Canvas and a small pop-up will appear (in black) with the figure; you can also simply consult the weekly sums that Canvas provides. Once you have your weekly points, you can use the grade calculator I have provided on Canvas to track your cumulative points and determine your percentage grade (ie, of total possible points) on a week-by-week basis.

Attendance policy:

Attendance policy is included in the grading policy.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the Social Sciences area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas.

This course will help master course content, and support students’ broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I understand human experiences and connections?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze the complexity of human behavior, and how historical, econom
  political, social, or geographic relationships develop, persist, or change.

Course content, activities and exercises in this course should help students develop the following Ca
Ready Competencies:

- Intercultural Competence
- Perspective-Taking
- Persuasion