

Note: Course requires a single organized day of travel in Metz on Friday, February 13

HTS 2084 - Technology and Society

Georgia Tech-Europe

Spring 2026

Course Syllabus

Instructor

Dr. Timothy Stoneman

School of History and Sociology

Office 226, GT-E Building

Time and Place

11-12:15pm, **Red Room**

tim.stoneman@hsoc.gatech.edu

Course Attributes

HTS 2084 fulfills the social science and ethics requirements at Georgia Tech.

A Personal Introduction

I am the product of three influences in my background: the northeast, the ACC, and France. I grew up in the greater New York area, but spent a high school year studying abroad (like you) in France. I attended Duke and double majored in history (no surprise!) and comparative literature (French/Russian). I tried careers in pre-law and retail banking before settling on high-school teaching in the Atlanta area. I completed my PhD at Georgia Tech in 2006 in the history and sociology of science and technology (HSOC) and started teaching at GTL in summer of 2005! After a “postdoc” at MIT for two years, I ended up back in the ACC as a visiting assistant professor at Clemson University and then returned to GTL in France in 2011, this time for good. I have been at GT-E ever since (along with my family!).

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, creative 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 smart 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? Second, where does technological change come from - what are its roots or origins? 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 Objectives

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.*

(* Language is taken directly from the General Education Mission Statement of Georgia Tech’s Core Curriculum, available on the Registrar website.)

Core IMPACTS

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, economic, political, social, or geographic relationships develop, persist, or change.

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

- Intercultural Competence
- Perspective-Taking
- Persuasion

Ethics Requirement

In order to fulfill the ethics requirement at Georgia Tech, HTS 2084 will align course-level objectives, content, and assessments with the following criteria of student success:

- An ability to recognize ethical and professional responsibilities in real-world contexts.
- An ability to assess actions or decisions based on established ethical principles and theories, or through deliberative processes.
- An ability to consider the implications of actions, both broadly (e.g. global, economic, environmental, or societal) and for individuals.

Field trips

We will take a single required full-day field trip to class-related historic sites in Metz on *Friday, February 13* from 9am-4pm including Metz cathedral, as well as a trip to Metz's two train stations on *Tuesday evening, March 3* from 5:30-7pm. We will also visit Institut Lafayette in the evening on *Tuesday evening, March 17* from 5:30-7pm. Note: You will receive class time credits for the field trips (two classes) during which we do not have to meet.

Grading

Please see Canvas for the separate document "grading policy" on Canvas Modules, which forms part of the course syllabus. Please review the document carefully and let me now if you have questions or would like further explanation.

How to Succeed in Class

The greatest keys to success in the class are preparation and participation. If you make a sincere effort to prepare class materials ahead of time and contribute daily to class discussion, you should perform well. I have designed the class to maximize student involvement. To succeed, the class therefore requires your active effort. Establish good working habits early in the semester so that you have less to worry about later. Try to avoid distractions (especially electronics), both in class and when preparing. It can be hard, especially with readings that may seem long at times, but make the effort and I think that you will find it worthwhile.

Communication Plan

I will communicate with you outside of class in two primary ways: through Canvas Announcements and Inbox. On Monday morning, I will send an Announcement for the upcoming week indicating the material that we will cover (Module), as well as the assignments that will be due. I will also give our two field trip schedules through Announcements. If I have a special need to contact the class on a specific matter, I will use email (Inbox) to reach you each individually.

You can always reach me through email (tim.stoneman@hsoc.gatech.edu). I do not keep office hours, since I am frequently in the building, but I can arrange to meet you anytime according to your schedule – just send me an email request. Please note that all late work, even if excused, should be submitted through canvas for grading purposes. If an assignment is closed, just ask me and I will open it for you.

Note: Make sure to leave notifications on in Canvas so that you receive Announcements.

Honor Policy

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. Any student suspected of cheating or plagiarizing on an assignment will be reported to the Office of Student Integrity, which will investigate the incident and identify the appropriate penalty for violations.*

(* Language is taken directly from the GT Syllabus Essentials, 2023-2024.)

Students are expected to abide by the Georgia Tech honor code. All infractions will be handled through the Office of the Dean of Students and treated with the utmost seriousness.

Accommodation for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at 404.894.2563 or their website, as soon as possible, to discuss your needs and to obtain an accommodations letter. Then, make an appointment with me as soon as possible to discuss your learning needs.*

(* Language is taken directly from the GT Syllabus Essentials, 2023-2024.)

Statement on Inclusion

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society. (Statement taken from Ivan Allen College Dean's Office.)

Miscellaneous

Modules - The class will use Canvas Modules to regulate the flow of class.

Assignments – You can find all assignments in the Assignments section of Canvas, organized by group. I will remind you of assignments that are due both in Modules and through weekly Announcements.

Class calendar – Please check the **class calendar** on **Canvas Collaborations** for a detailed class schedule.

Electronics - Please do not use electronic devices in class, including laptops and cell phones, except for explicit in-class assignments. Use of electronics detracts from discussion and is a distraction to the people around you. For exceptions, please see me.

Food and drink - Food and drink are not allowed in the classroom (per GT-E policy), except on special class occasions (such as baguette tasting).

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.

Course Units

- Technology & society
- Historical case studies (5)
 - Paleolithic fire
 - Gothic cathedrals
 - Artisanal French bread
 - Railways
 - Smartphones
- Debate