



Societal Impacts of Information Technology - CS 485

Computer Science • School of Engineering and Science

Fall 2022

Meeting Times: Section A: Tuesdays 9:30am-10:20am Gateway North 204
 Section B: Thursdays 9:30am-10:20am EAS 330
 Section C: Thursdays 11:00am-11:50am Babbio 104

Instructor: Prof. Eric Koskinen • eric.koskinen@stevens.edu

Office Hours: TBA

Course Web Address: Canvas

Prerequisite(s): You must be a senior (graduating Fall'22 or Spring '23) in CS or CyS.

Course Assistants: TBA

COURSE DESCRIPTION

Students explore trade-offs posed by modern information technologies such as the Internet, mining of personal data, web tracking, and surveillance systems. Also covered are regulations and laws—both in the US and abroad—that affect individuals, organizations, and governments. Students will learn how actions undertaken in their daily lives as IT professionals may have broad consequences, both planned and unplanned. Students will learn how to identify and analyze these consequences.

LEARNING OBJECTIVES

After successful completion of this course, students will be able to...

1. Identify which individuals, groups, and societies are affected by a given information technology
2. Identify and analyze the advantages and disadvantages of a given information technology for those affected by it
3. Recall standard professional codes of ethics and explain how the codes bear on the everyday activities of an IT professional
4. State how the job activities of a typical IT professional might be connected to major technology-related ethical issues of the day
5. Make effective oral presentations
6. Write critical analyses of the impact of information technology

These are associated with two general outcomes for Stevens' accredited CS undergraduate program: "Responsibility: . . . understanding of professional, ethical, legal, security and social issues and responsibilities." "Impact: . . . analyze the local and global impact of computing on individuals, organizations, and society."

COURSE MATERIALS

Textbook(s): None

Other Readings: Announced during the semester.

FORMAT AND STRUCTURE

This course is formatted around discussions led by students. Students will work in groups of 4 (approximately), selecting a social impact issue and a corresponding article to read. Each class will involve a mixture of readings done ahead of time, student presentations, individual questions/reactions, breakout discussions and essays.

COURSE REQUIREMENTS

- **Group Presentations.** (Objective 6) With your group, you will select an article, prepare a presentation, and give the presentation to the class. The presentation should succinctly describe the relevant technology, the stakeholders (Objective 1) and the consequences and impact (Objective 2). Then describe any different arguments and positions about the significance, possible technological, economic, or legal ways to alter the impact, etc.
 - As part of the presentation, you will individually select a position pertaining to some aspect of the article. You will articulate the position and argue in support of it in response to audience questions/comments. You don't have to have a personal belief in the stance, but you do need to be prepared to argue for it.
- **Attendance and Participation.**
 1. **Reading (Before Lecture).** Prior to each class period, you will read the assigned article and come prepared to class to ask a question.
 2. **Lecture Question (During Lecture).** During lecture you will submit questions or comments you have into a Canvas prompt. These will be collected immediately and used to catalyze discussions.
 3. **Breakout Groups (During Lecture).** Before and after the presentation there will be prompt-directed discussions in breakout groups. Attendance and participation will be tracked.
 4. **Presentation Feedback (After Lecture).** After class, you will submit feedback to the presenters.
 5. **Assigned readings/recordings.** From time-to-time other materials will be assigned for you to read or videos to watch, with follow-up questions to respond to on Canvas.
- **Essays.** (Objectives 1, 2, 3, 4, 5, 6) Each student will submit **4** written assignments. These assignments must be done individually, unless otherwise specified by the instructor. The detailed format of these essays will be announced.

Students are responsible for reading and understanding the course policies and for announcements made in class and in Canvas.

GRADING PROCEDURES

Grades will be based on:

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| Attendance and Participation (Reading, Lecture Questions, Breakouts, Presentation feedback, etc) | 40% |
| Writing (Essays) | 40% |
| Speaking (Presentations, Stance) | 20% |

Attendance and Late Policy

- Attendance will be based on the Course Requirements above. Note that this means you must be present, engaged and involved in the discussions. It also means you must complete the Canvas prompts associated with participation.
- **Note:** Each class session (attendance, reading, questions, breakouts, feedback) is worth 3.33% of your final grade (i.e. 40% divided by 12 lectures).
- If you miss 1 or 2 class sessions you won't lose any attendance points. (Illness, interview, etc.)
- **WARNING: On your 3rd missed class, you will lose 10% of your final grade.** (And each subsequent missed class is worth 3.33%, i.e., one step down on your final grade.)
- This is a one-credit course and each individual assignment has relatively little weight. Hence the following simple policy for homework: no credit if late.

ACADEMIC INTEGRITY

Undergraduate Honor System

Enrollment into the undergraduate class of Stevens Institute of Technology signifies a student's commitment to the Honor System. Accordingly, the provisions of the Stevens Honor System apply to all undergraduate students in coursework and Honor Board proceedings. It is the responsibility of each student to become acquainted with and to uphold the ideals set forth in the [Honor System Constitution](#). More information about the Honor System including the constitution, bylaws, investigative procedures, and the penalty matrix can be found online at <http://web.stevens.edu/honor/>

The following pledge shall be written in full and signed by every student on all submitted work (including, but not limited to, homework, projects, lab reports, code, quizzes and exams) that is assigned by the course instructor. No work shall be graded unless the pledge is written in full and signed.

"I pledge my honor that I have abided by the Stevens Honor System."

Reporting Honor System Violations

Students who believe a violation of the Honor System has been committed should report it within ten business days of the suspected violation. Students have the option to remain anonymous and can report violations online at www.stevens.edu/honor.

LEARNING ACCOMODATIONS

Stevens Institute of Technology is dedicated to providing appropriate accommodations to students with documented disabilities. The Office of Disability Services (ODS) works with undergraduate and graduate students with learning disabilities, attention deficit-hyperactivity disorders, physical disabilities, sensory impairments, psychiatric disorders, and other such disabilities in order to help students achieve their academic and personal potential. They facilitate equal access to the educational programs and opportunities offered at Stevens and coordinate reasonable accommodations for eligible students. These services are designed to encourage independence and self-advocacy with support from the ODS staff. The ODS staff will facilitate the provision of accommodations on a case-by-case basis.

Disability Services Confidentiality Policy

Student Disability Files are kept separate from academic files and are stored in a secure location within the Office of Disability Services. The Family Educational Rights Privacy Act (FERPA, 20 U.S.C. 1232g; 34CFR, Part 99) regulates disclosure of disability documentation and records maintained by Stevens Disability Services. According to this act, prior written consent by the student is required before our Disability Services office may release disability documentation or records to anyone. An exception is made in unusual circumstances, such as the case of health and safety emergencies.

For more information about Disability Services and the process to receive accommodations, visit <https://www.stevens.edu/office-disability-services>. If you have any questions please contact: Phillip Gehman, the Director of Disability Services Coordinator at Stevens Institute of Technology at pgehman@stevens.edu or by phone (201) 216-3748.

INCLUSIVITY

Name and Pronoun Usage

As this course includes group work and in-class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect. This includes the ability for all students to have their chosen gender pronoun(s) and chosen name affirmed. If the class roster does not align with your name and/or pronouns, please inform the instructor of the necessary changes.

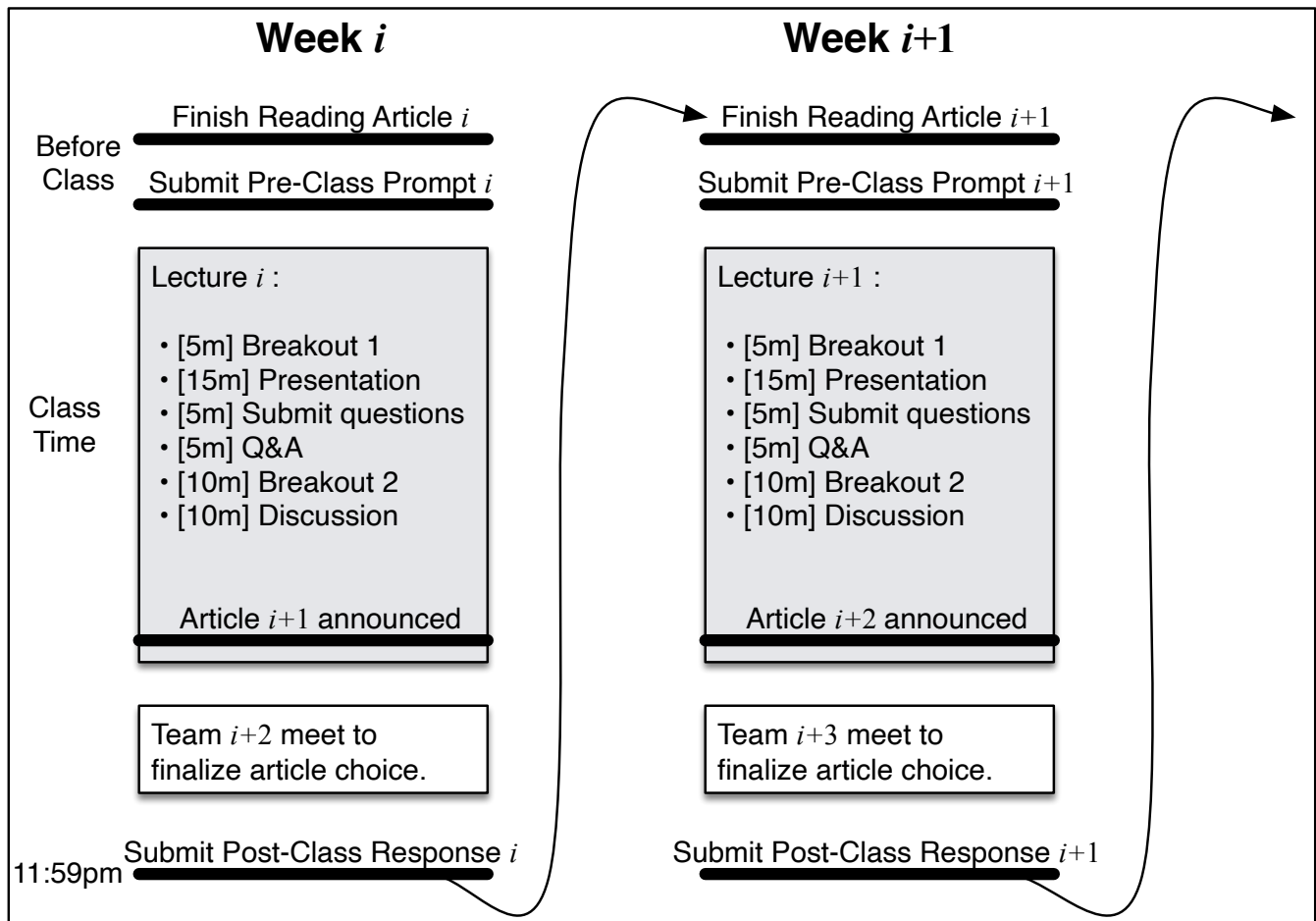
Inclusion Statement

Stevens Institute of Technology believes that diversity and inclusiveness are essential to excellence in academic discourse and innovation. In this class, the perspective of people of all races, ethnicities, gender expressions and gender identities, religions, sexual orientations, disabilities, socioeconomic backgrounds, and nationalities will be respected and viewed as a resource and benefit throughout the semester. Suggestions to further diversify class materials and assignments are encouraged. If any course meetings conflict with your religious events, please do not hesitate to reach out to your instructor to make alternative arrangements.

You are expected to treat your instructor and all other participants in the course with courtesy and respect. Disrespectful conduct and harassing statements will not be tolerated and may result in disciplinary actions.

COURSE SCHEDULE

- Each week's lecture will be devoted to the next group's article, presentation, discussion, and reaction. After class, there will be communication to prepare for the subsequent two groups. Here is a diagram:



Note:

- Readings are due **before** class begins (**9:29am** for Sections A&B, and **10:59am** for Section C).
- Post-Lecture feedback must be completed by **11:59pm** on the day of the lecture.
- Essays are due by 11:59pm on the scheduled date. To be announced on Canvas.

Groups

- See Canvas.