

The Information Society



We are often told that we are living in an “Information Society,” and indeed, this is a truth that seems self-evident: communications and information technologies increasingly pervade our homes, our workplaces, our schools, even our own bodies. But what exactly do we mean when we talk about the “Information Society”? If we are living in an Information Society, when did it come into being? What developments — social, economic, political, or technological — made it possible? How does it differ from earlier eras? And finally, and most significantly: what does it all mean?

This course will explore the ways in which Western industrialized societies, over the course of the previous two centuries, came to see information as a crucial commercial, scientific, organizational, political, and commercial asset. Although at the center of our story will be the development of new information technologies — from printing press to telephone to computer to Internet — our focus will not be on machines, but on people, and on the ways in which average individuals contributed to, made sense of, and come to terms with, the many social, technological, and political developments that have shaped the contours of our modern Information Society. Our goal is to use these historical perspectives to inform our discussions about issues of contemporary concern about information technology.

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School of Informatics & Computing

I222 • Fall 2019

I222: The Information Society

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Course Goals:

The goal of the course is to provide you with the tools for critically evaluating claims made about the role and influence of information technology in modern society. Our primary methodology will be historical. This might at first seem unusual, since so much of the rhetoric of the Information Society asserts that there is no relevant history, and that we are living in an era in which the old rules and modes of thinking no longer apply. But we are not the first society to believe itself to be living through an unprecedented technological revolution, and so in this course, we will learn to apply the time-honored perspectives of the humanistic disciplines to the study of contemporary technological developments.

Students will learn to think historically about information technologies, to broaden their perspective on the relationship between technology and society to include insights from the humanities and social sciences, and to master the very best available relevant scholarly literature.

Course Format:

The Information Society course meets twice weekly. To the degree possible with such a large course, our meetings will be a mixed lecture-discussion format. Our first session each week will typically introduce our week's topic; the second provides further development, as well as an opportunity to talk about the readings and answer any questions that you might have.

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Attendance:

Attendance in the course is more than usually essential. My lectures make extensive use of images, audio, and video. Although I will make some of this material available on the course Canvas site, much of it will be available only during class. All students will have one discretionary absence that they can use during the semester. Students using a discretionary absence will not need to present documentation to support the absence, such as a doctor's note. Students who need to miss more than one class should inform their AI beforehand to avoid being penalized.

Readings:

The readings in the course draw on the very best literature from history, sociology, anthropology, and the emerging field of Internet studies. Your need to prepare each week's readings *in advance* of the first lecture of that week.

There are no required book for the course. All of the readings will be made available electronically via the Canvas site.

Grading:

Grading in this class will be based on three major components: weekly reading response online questions/quizzes (50%); in-class mid-term (25%); final exam (25%).

Email Etiquette

Please give us at least 24 hours to reply to your emails, and we will do the same for you. Please put the course number in the Subject line and remember to sign your email with your name. We expect the language and structure of your emails to be professional. This includes punctuation, salutations/signature, etc.

Technology Policy

Students may use laptops or mobile devices in the class, both during lecture and discussion, provided that such devices are used to support learning in class. The use of laptops and mobile devices will at times be helpful and highly encouraged. However, use of laptops and mobile devices that is distracting to other students or the instructors is not allowed. If you are reprimanded for this kind of use during class, you will lose participation/attendance points for that day. Technology use during the discussion sections will vary according to the week's activities—laptops and mobile devices may be useful or requested in discussion sections. Follow the instructions given by your discussion section's AI.

Religious and Civic Observations

In accordance with the Office of the Dean of the Faculties, any student who wishes to receive an excused absence from class must submit a request form available from the Dean of the Faculties for each day to be absent. This form must be presented to a course instructor by the end of the second week of this semester. A separate form must be submitted for each day of class you will be missing. The form must be signed by an instructor, a copy made, and the original returned to the student. Information about the policy on religious observation can be found at the following web site: www.iub.edu/~vpfaa/welcome/forms.shtml#religious.

Students with Special Needs

Please discuss any accommodations you may need with the instructor. Please visit studentaffairs.iub.edu/dss/ and fill out the forms, requesting that memos be sent to one of the instructors from the Office of Disability Services for Students regarding your testing/classroom modifications. You may also contact the office by telephone (812.855.7578) or visit in person in the Herman B. Wells Library, room W302.

Classroom Behavior

Everyone is expected to conduct themselves professionally during class. This includes arriving on time. Arriving late or using laptops or other devices for entertainment distracts everyone.

Students who arrive at class more than ten minutes late, leave early without advance permission of an instructor, or use electronic devices may not receive attendance and/or participation credit for the day, at the discretion of the instructors. Professional behavior also entails being respectful of others and their opinions—even and especially when you do not agree with them.

Sexual Misconduct and Title IX

As your instructor, one of my responsibilities is to create a positive learning environment for all students. Title IX and IU's Sexual Misconduct Policy prohibit sexual misconduct in any form, including sexual harassment, sexual assault, stalking, and dating and domestic violence. If you have experienced sexual misconduct, or know someone who has, the University can help.

If you are seeking help and would like to speak to someone confidentially, you can make an appointment with: Sexual Assault Crisis Services (SACS) at (812) 855-8900 (counseling services); Confidential Victim Advocates (CVA) at (812) 856-2469 (advocacy and advice services); IU Health Center at (812) 855-4011 (health and medical services).

It is also important that you know that Title IX and University policy require me to share any information brought to my attention about potential sexual misconduct, with the campus Deputy Title IX Coordinator or IU's Title IX Coordinator. In that event, those individuals will work to ensure that appropriate measures are taken and resources are made available. Protecting student privacy is of utmost concern, and information will only be shared with those that need to know to ensure the University can respond and assist. I encourage you to visit stopsexualviolence.iu.edu to learn more about the resources available to victims of sexual assault or harassment.

Course Schedule

I Introduction

August 27: Introducing the Information Revolution!

August 29: Gutenberg, Galileo, Google

Reading(s): Cook, Scott D.N. "Technological Revolutions and the Gutenberg Myth." In *Internet Dreams: Archetypes, Myths, and Metaphors*, edited by Mark Stefik. Cambridge, MA: MIT Press, 1997.

Assignment: Medieval Management Consultant

II The Age of Information

September 3: The Politics of the Post-Office

September 5: The Annihilation of Space & Time

Reading(s): Henkin, David. "Embracing Opportunities: The Construction of the Personal Letter." *The Postal Age: The Emergence of Modern Communications in Nineteenth-Century America* (University of Chicago, 2006); Collister, Lauren. "Why Does Using a Period in a Text Message Make You Sound Insincere or Angry?" *New Republic* (July 19, 2016)

<https://go.gl/NND8CK>

Assignment: Digital Diary: the social norms of text messages

III Industrializing Information

September 10: Information Factories

September 12: When Computers Were Human

Reading(s): Campbell-Kelly, Martin. *The Railway Clearing House and Victorian Data Processing*, 1994.

Assignment: Tracking Packages in the 19th Century

IV When Information is Power

September 17: From Mad Men to Big Brother

September 19: Popular Cinema, Mass-Market Music, Intellectual Property

Reading(s): Urban, Glen, Sultan, Fareena, and Qualls, William. "Placing Trust at the Center of Your Internet Strategy." *MIT Sloan Management Review* (Fall 2000); Gladwell, Malcolm. "The Science of Shopping." *New Yorker* (Nov. 4, 1996)

Assignment: In the Internet We Trust ...

V War: what is it good for?

September 24: Giant Brains; or, Machines that Think

September 26: Build your own Computer!

Reading(s):

Campbell-Kelly, et al. "Inventing the Computer." Chapter 4 in *Computer: A History of the Information Machine* (2013)

Assignment: Simulation: Enigma Machine Emulator

VI The Computerization of Society

October 1: IBM and the Seven Dwarves

October 3: Software Revolution

Reading(s): Campbell-Kelly, et al. "Software" Chapter 8 in *Computer: A History of the Information Machine* (2013)

Assignment: The Computer Girls Take Over...

VII Silicon Valley 1.0

October 8: Simulations, Simulacra, and the Matrix

October 10: Silicon Valley 1.0

Reading(s): Campbell-Kelly, et al. "New Modes of Computing" Chapter 9 in *Computer: A History of the Information Machine* (2013); Daniel Hertz, "What Computer Games Taught Me About Urban Planning ...and what they didn't" *The Atlantic Monthly* (2/25/2016)

Assignment: The Game of Life

VIII Information Regurgitation

October 15: Mid Semester Wrap-Up

October 17: Mid-Term Exam

Reading(s): **In-class mid-term:** covers weeks 1-7.

IX Great Myths in the History of Computing

October 22: Visions of Personal Computing

October 24: From Hippies to Hackers

X The Social Construction of the Personal Computer

October 29: The Importance of Platforms ...

November 1: ARPAnet to Internet

Reading(s):

Cringely, Robert X. *Accidental Empires: How the Boys of Silicon Valley Make Their Millions, Battle Foreign Competition, and Still Can't Get a Date* (Addison-Wesley, 1992). Selected chapters.

Assignment: Primary Source Assignment: The History of The PC

XI Origins of the Internet

November 5: The Architecture of the Internet

November 7: The Materiality of the Virtual

Reading(s):

Abbate, Janet. *Inventing the Internet* (MIT Press 1999), Chapters 1-2.

Assignment: Packet Analysis Assignment

XII Cyberspace(s)

November 12: ~~Social Media~~ Cancelled

November 14: ~~Big Data~~ Clara - data and science

. Chapters 4-5.

Assignment: Virtual Ethnography

XIII Convergence

November 19: ~~Algorithms rule the world (?)~~ Social media

November 21: ~~There's a human in your algorithm~~ Big data

Reading(s):

Goldsmith, Jack and Wu, Timothy. *Who Controls the Internet?: Illusions of a Borderless World* (Oxford University Press, 2006). Selected excerpts.

Assignment: I think X should be banned from the Internet...

XIV Post-Modern, Post-Industrial, Post-Information?

December 3: Intelligent machines, autonomous vehicles ...

December 5: Internet Everywhere

Reading(s): Various short online articles: "How Sticky Is Membership on Facebook? Just Try Breaking Free"; "Facebook can ruin your life ..."; "Oh Crap. My Parents Joined Facebook"; "Psychologist finds Wikipedians grumpy and closed-minded"; "Angry online divorcee 'kills' virtual ex-hubby"; "SEXTORTION AT EISENHOWER HIGH"; "Judges fear dangers of online 'rat' database"; "Teen Tests Internet's Lewd Track Record"; "E-Mail Surveillance Renews Concerns in Congress"; "Stop the Internet, I want to get off!"; "How Google Earth Ate Our Town"; "China's All-Seeing Eye"; "U.S. corporations massively read employee e-mail"; "The Invasion of Privacy Through Your Mobile Phone"

Assignment: Digital Diary: Social Media at IU

XV Red Pill, Blue Pill ...

December 10: The Information Revolution Revisited

December 12: ~~Big Finish~~ Final exam

Reading(s): No readings.

Final Exam Information:

~~The final exam for this class has been scheduled by the Registrar's office and is set for Thursday, December 19 from 12:30-2:30pm.~~