Philosophy of technology

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**Keywords:** philosophy, media studies, social studies of technology, technological determinism

**Educational Technology 0858-601**

Technology serves to institute new, more effective, and more pleasant forms of social control and social cohesion. —*Herbert Marcuse, One-Dimensional Man*

## Description

The philosophy of technology exposes students to the major philosophical movements through seminal works by Plato, Aristotle, Bacon, Kant, Rousseau, Heidegger, McCluhan, Marx, Haraway, Latour, and others. These critical positions will help students analyze educational technology along pedagogical, social, political, and ethical lines.

Having a foundation in the philosophical roots of technology helps orient students to the broader implications of the role that technology plays in society. These philosophical traditions have continued to prove their relevance today, where technology has the capability of improving and constraining what we can do in our lives. The range of philosophical positions that the course will expose students to will give them the intellectual tools to approach and evaluate what technologies they want to emphasize in their careers and how that might impact the lives of others who will use the technology.

## Goals and Objectives

The course provides students with a broad historical perspective of the philosophical positions on the role of technology in society. In addition to understanding how technology is used, students should also be aware of how it changes our relation to mind, perception, reality and society.

By the end of the course, students should be able to:

1. Understand major topics in philosophy of technology
2. Apply a philosophical lens to critique current and emerging technologies
3. Compare and contrast different philosophical traditions and synthesize them to make coherent arguments and assess the role of technology in society
4. Understand various positions (e.g. feminist, anti-technology, post-colonial) and why they are relevant to the development and use of educational technology

## Required texts

Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. ISBN 1405111631

Scharff, R. C., & Dusek, V. (2003). *Philosophy of technology: The technological condition: An anthology.* Wiley-Blackwell. ISBN 0631222197

## Class sessions

### Introduction to philosophy of technology

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 1)

### Defining technology

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 2)
* Plato, Aristotle, Bacon (2003) In R. C. Scharff & V. Dusek (Eds.) Philosophy of technology: The technological condition (pp. 3-37)
* Scharff, R. C. and Dusek, V. (2003) *Philosophy of technology: The technological condition.* (pp. 208-220)

### Technology and society

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 3)
* Veblen, T. (1921) The engineers and the price system. <http://socserv2.mcmaster.ca/~econ/ugcm/3ll3/veblen/Engineers.pdf>

### Technology and thought

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 4)
* Kant, Comte, Rousseau, Marx, Engels (2003) In R. C. Scharff & V. Dusek (Eds.) *Philosophy of technology: The technological condition* (pp. 38-79)

### Phenomenology and hermeneutics

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 5)
* Scharff, R. C. and Dusek, V. (2003) *Philosophy of technology: The technological condition.* (pp. 487-529)

### Technological determinism

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 6)
* McLuhan, M. (1994) *Understanding Media: The Extensions of Man.* Cambridge, MA: MIT Press. (pp. 3-76)

### Autonomous technology

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 7)
* Winner, L. (2004) Technologies as forms of life. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 103-114). Lanham: Rowman & Littlefield Publishers, Inc.

#### Optional reading:

* Winner, L. (2004) Do artifacts have politics?. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 289-302). Lanham: Rowman & Littlefield Publishers, Inc.

### Social constructivism

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 12)
* Latour, B. (2004) A collective of humans and nonhumans. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 179-190). Lanham: Rowman & Littlefield Publishers, Inc.

#### Optional reading:

* Latour, B. (2004) Laboratories. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 449-468). Lanham: Rowman & Littlefield Publishers, Inc.

### Resisting technology

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 11)
* Postman, N. (1993) *Technopoly.* New York: Vintage Books.
* Marcuse, H. (2004) The New Forms of Control. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 34-42). Lanham: Rowman & Littlefield Publishers, Inc.

### Technology and feminism

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 9)
* Haraway, D. J. (2004) A cyborg manifesto. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 161-178). Lanham: Rowman & Littlefield Publishers, Inc.
* Turkle, S. (1997) *Life on the screen: Identity in the age of the Internet. New York: Touchstone.* (Chapter 2, 8)

### Eastern perspectives

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 10)
* Scharff, R. C. and Dusek, V. (2003) *Philosophy of technology: The technological condition.* (pp. 378-382)
* Levi-Strauss, C. (1968) The savage mind. Chicago: University of Chicago Press (Chapter 1)
* Hutchins, E. (1996) *Cognition in the wild.* Cambridge, MA: The MIT Press. (Selections)

### Technology and bodies

#### Readings:

* Dusek, V. (2006) *Philosophy of technology.* Malden, MA: Blackwell Publishing. (Chapter 8)
* Elliott, C. (2004) Enhancement technology?. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 373-380). Lanham: Rowman & Littlefield Publishers, Inc.
* Kurzweil, R. (2004) Twenty-first century bodies. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 381-396). Lanham: Rowman & Littlefield Publishers, Inc.

### Technology and control

#### Readings:

* Foucault, M. (2004) Panopticon. In D. M. Kaplan (Ed.) *Readings in the Philosophy of Technology* (pp. 359-372). Lanham: Rowman & Littlefield Publishers, Inc.
* de Certeau, M. (1984) *The practice of everyday life.* Berkeley: University of California Press (pp. 1-60)
* Noble, D. (1986) *Forces of production: A social history of industrial automation.* Oxford: Oxford University Press. (Selections)

### Technology and behavior

#### Readings:

* Lessig, L. (2006) Code: And other laws of cyberspace, version 2.0. <http://pdf.codev2.cc/Lessig-Codev2.pdf>
* TED talks, Dan Ariely: <http://www.ted.com/talks/lang/eng/dan_ariely_asks_are_we_in_control_of_our_own_decisions.html>

#### Optional reading:

* Ariely, D. (2010) *Predictably irrational.* New York: Harper Perennial. (Chapter 1)

### Final presentations and wrap-up

Students summarize key points in their final papers and class wraps-up the topics covered in the course.

## Assignments & Grading

### Class discussions (20%)

Since this is a reading-heavy course, students are expected to participate in class discussions, both as a large group and in smaller groups. The instructor will use discussions to gauge students’ understanding of the material, and their ability to synthesize and express ideas related to the philosophy of technology.

*The three papers are inter-related so students should have a general idea of what their interests are with regards to the topic they want to write about.*

### [TED talk](http://www.ted.com) Emerging Technology (20%)

TED talk is a great resource to find out emerging technologies and fringe ideas. Browse through their videos and pick one to focus on. Write a short commentary on why the video appealed to you, what possibilities it has for society and education, and where you think it would go. (3-4 pages)

### Analysis of the impact of a technology on society (mid-term) (20%)

Use the topics covered in class to analyze a technology that has made an impact on society (this can be any technology, it does not need to be a *digital* technology). Analyze this technology, using the perspectives of at least three readings from the class. (5-7 pages)

### Comparison of an emerging and existing technology (final paper) (40%)

Expand on the mid-term paper and contrast the technology chosen for that paper with an emerging technology. The emerging technology should not be older than ten years old, and the student would have to define why he/she has defined the technology as emerging and how it’s related to the technology picked for the mid-term. For example, if a student chose to analyze the telephone for the mid-term paper, she will have to pick a technology that is related to the telephone, either directly or tangentially. The student then has to draw from any of the class readings from class and write a critical analysis on how the technologies will shape society in the near future. (15-17 pages)

## Course Readings & Bibliography

de Certeau, M. (1984). *The practice of everyday life.* Berkeley: University of California Press. ISBN 9780520047501

Hutchins, E. (1995). *Cognition in the wild*. Cambridge Mass.: MIT Press. ISBN 9780262082310

Kaplan, D. (2009). *Readings in the philosophy of technology (2nd ed.)*. Lanham: Rowman & Littlefield Publishers. ISBN 9780742564008

Lessig, L. (2006). *Code 2.0*. New York: Basic Books. Retrieved from <http://pdf.codev2.cc/Lessig-Codev2.pdf>

Lévi-Strauss, C. (2000). *The savage mind*. Chicago: Univ. of Chicago Press. ISBN 9780226474847

McLuhan, M. (1994). *Understanding media: the extensions of man (1st ed.)*. Cambridge Mass.: MIT Press. ISBN 9780262631594

Noble, D. (1984). F*orces of production: a social history of industrial automation (1st ed.)*. New York: Knopf. ISBN 9780394512624

Postman, N. (1992). *Technopoly: the surrender of culture to technology (1st ed.)*. New York: Knopf. ISBN 9780394582726

Turkle, S. (1995). *Life on the screen: identity in the age of the Internet.* New York: Simon & Schuster. ISBN 9780684803531