PHILOSOPHY OF TECHNOLOGY   PHIL 294-02
SPRING 2010   MWF 2:20

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Course Description

Most of the time we use technology without giving it a second thought—particularly a second, philosophical thought: How do technological innovations add not only to the contents of our world but shape the very contours of our world and our experience within it? This question is a key one for the philosophy of technology, a sub-field of inquiry aimed giving the material environment of our lives its philosophical due. In this course we will look at technology from a variety of perspectives, such as phenomenological, critical, and actor-network theory. We will consider questions such as: What is the relationship between technology and "the good life"? Between technology and democracy? What are some of the ethical and social issues raised by newer technologies, such as nanotechnology, information technology, and the interface between them?   What is technology anyway? Our readings will be drawn from both classic and contemporary sources whose voices and authors will include those of Jacques Ellul, Martin Heidegger, Albert Borgmann, Andrew Feenberg, Don Ihde, Hubert Dreyfus, Luciano Floridi, Paul Virilio, and Bruno Latour.

Learning goals

The learning goals for this course are organized around three themes: substance, skills, and self-awareness.

With respect to substance, this course is designed to help you acquire a critical understanding of: (a) fundamental questions, concepts, theoretical perspectives, and thematic developments within the philosophical of technology; (b) the way that technology works to shape human experience; and (c) the ethical and social impacts associated with emerging technologies.

The design of this course is also intended to give you a way of developing key skills associated with philosophy in particular and the liberal arts in general. By the end of this semester, you should be better able to read, analyze, and evaluate difficult philosophical writing with an inquisitive and thoughtful mind. Because this course is approved to satisfy Macalester's graduation writing requirement, you will also be able to practice and improve your ability to construct your own philosophical positions and express and defend them in written form.

Self-awareness as a philosophical learning goal has its roots in Socrates' dictum that "the unexamined life is not worth living." I hope this course will expand your own capacities for (a) thinking about the nature as well as the ethical and social impacts of modern and developing technologies; (b) becoming aware of and framing philosophical issues associated with technology; (c) understanding how technology works to shape your own experience, and (d) respecting well-reasoned philosophical views, even when these views may be at odds with the ones you share.

Required Texts

Albert Borgmann, ***Technology and the Character of Contemporary Life.*** University of Chicago Press, 1984.

Hubert Dreyfus**, *On the Internet***. Routledge, 2009.

Andrew Feenberg, ***Questioning Technology***. Routledge, 1999.

Don Ihde, ***Ironic Technics.*** Automatic Press/VIP, 2008.

Bruno Latour, ***Reassembling the Social: An Introduction to Actor-Network Theory.*** Oxford, 2007.

Peter-Paul Verbeek, ***What Things Do.*** Penn State University Press, 2005.

Paul Virilio, ***Speed and Politics***. Semiotext(e), 2007.

Additional readings for this course will be placed on library e-reserve, reserve, or will be available online.

Academic Integrity

In reviewing your work, I will adhere to the College's *Academic Integrity Policy* as published in the *Student Handbook.*

Through the gift of your attention, you also help support the integrity of the academic environment. For your own sake and for the sake of others when we are in class together please refrain from texting, tweeting, and the like.

Coursework

For this course, you will be asked to submit two short papers, a research paper, and to take a midterm and a final exam. The final will not be comprehensive.

The two short papers will be 5-8 pages in length and will ask you to develop a stance on an issue identified in class relating to philosophical approaches to technology where competing ideas exist. Because their purpose is for you to develop such a stance, these papers will take the form of a "position paper" in philosophy. Guidelines for writing a position paper will be distributed in class. The first paper will invite you to take a stand on a theoretical issue. The second paper will ask you to take a position on either (a) the relationship between technology and the good life; (b) technology and liberal democratic society; or (c) one of the ethical or social questions related to emerging technologies.

I will initially return these papers to you with comments but without a grade. My comments will address how well you develop the philosophical content of your paper as well as how well you present this content in written form. You will then need to revise these papers and turn in a second, final draft. The second draft will be due one week after you receive your comments on the first draft.

The third paper, 12-15 pages in length, will be a research paper on a topic related to the subject matter of this course. This paper can take one of two forms: (a) an expansion of your second paper; or (b) a response to a journal article or articles. Suggestions for topics in both these areas will be distributed in class. As you are developing your paper, there will be informal "checkpoints" along the way. For example, you will be asked to submit a thesis and preliminary bibliography; and you will have the opportunity to talk with your fellow students to get informal feedback. This paper will be due at the beginning of the last week of class.

Late papers will be accepted without penalty if you let me know in advance that your paper will be late and you have an acceptable reason for turning it in after it is due. *Unexcused first and second paper first drafts, and unexcused third papers, will be accepted up to one week after the due date, but you will lose half a grade (e.g. A- to B+)*

on the first day your paper is later, and every two days thereafter. Unexcused first and second paper second drafts will not be accepted.

The midterm and the final will comprise short-answer and essay questions. The final will be held during finals week at the time listed in the college's exam schedule.

Coursework evaluation

Your final grade for this class will be based on the following percentages:

First paper	20%
Second paper	20%
Midterm	15%
Third paper	30%
Final	15%

I encourage you to participate in class through raising questions, taking part in discussions, etc. In this context, it is not how often you speak but what you say that matters. Class participation can improve or detract from your grade by one-half (eg from A- to A or B+).

Schedule of Topics, Readings, Exams, and Paper Due Dates

Please come to each class meeting prepared to talk about the reading assignment for that particular day. This schedule may change at the discretion of the instructor.

Week One

25 January	Welcome and orientation to the course
27 January	What is technology? Albert Borgmann, Part 1, pp. 1-31
29 January	Peter-Paul Verbeek, Chapter 1, pp.15-46

Week Two **Philosophical Questioning of Technology**

1 February	Borgmann, pp.35-48
3 February	Borgmann, pp.48-56
5 February	No class meeting today—I will be giving a talk at Lafayette College

Week Three

8 February	Borgmann, pp.157-169; 196-210

10 February	Senior Philosophy Day Along with students in other philosophy classes, today we celebrate the life of the mind by attending presentations by our graduating majors of their capstone papers. We will meet at the regularly scheduled class time in the Harmon Room.
12 February	Andrew Feenberg, 183-199

Week Four

15 February	Bruno Latour, pp. 27-62
17 February	Latour, pp.63-86
19 February	Latour, pp.141-156

Week Five

22 February	Verbeek, pp.99-119
24 February	Verbeek, pp.121-145
26 February	<mark>**First Paper Due**</mark>

Week Six

1 March	Verbeek, 147-172
3 March	**Technology and the Good Life** Borgmann, pp.210-249
5 March	Verbeek, pp.173-199

Week Seven

8 March	Verbeek, pp. 203-236
10 March	Don Ihde, pp.19-30
12 March	<mark>**MIDTERM**</mark>

Week Eight

15 March	Spring Break
17 March	No class this week
19 March	Spring Break

Week Nine   **Technology and democracy**

22 March	Borgmann, pp.85-101

| 24 March | Andrew Feenberg, pp.75-99 |

| 26 March | Feenberg, pp. 131-147 |

Week Ten   **The Internet**

| 29 March | Dreyfus, Introduction, and Chapters 1 and 3 |

| 31 March | Dreyfus, Chapters 4 and 5
Second Paper Due |

| 2 April | Good Friday—no class meeting |

Week Eleven   **The Internet and beyond**

| 5 April | Lawrence Hinman, "Esse est indicato in Google: Ethical and Political Issues in Search Engines"
http://www.i-r-i-e.net/inhalt/003/003_hinman.pdf
Don Ihde, Chapter One, pp. 1-17 |

| 7 April | Anisa Mnyusiwalla et. al., "Mind the Gap"; Alfred Nordmann and Arie Rip, "Mind the gap revisited"; Michelfelder, "Dirty Hands, Speculative Minds, and Smart Machines" (on e-reserve) |

| 9 April | Mark Weiser, "The Computer for the 21st Century"
http://www.ubiq.com/hypertext/weiser/SciAmDraft3.html

Adam Greenfield, *Everyware: The Dawning Age of Ubiquitous Computing* (on library reserve) |

Week Twelve   **Nanotechnology and its ethical and social implications**

| 12 April | No class meeting-- I will be at the ETICA and ETHICOMP meetings at the University of Rovira i Virgili, Tarragona, Spain
Readings for this week:

Patrick Lin and Fritz Allhoff, "Nanoscience and Nanoethics: Defining the Discliplines"; John Weikert and James Moor, "The Precautionary Principle in Nanotechnology"; Jeroen van den Hoven, "Nanotechnology and Privacy: Instructive Case of RFID" (on e-reserve) |

| 14 April | No class meeting |

| 16 April | No class meeting |

| 18 April | Make-up class meeting 1-4 pm location TBA
Thesis Statement and Preliminary Bio Due for Research Paper |

Week Thirteen   **Robotics, Human Enhancement, and Beyond**

19 April   Idhe, Chapter 4, pp. 43-57
                  Nick Bostrom, "The Future of Humanity" (on e-reserve)
                  George Dvorsky, "All Together Now: Developmental and
                  Ethical Considerations for Biologically Uplifting
                  Non-human Animals" (online at
                  http://jetpress.org/v18/dvorsky.htm)

21 April   Patrick Lin and Fritz Allhoff, "Untangling the Debate: The Ethics
                  of Human Enhancement"
                  http://files.allhoff.org/research/Ethics_of_Human_Enhancement.pdf

23 April   John Sullins, "When is a Robot a Moral Agent?"
                  Peter Asaro, "What Should we Want from a Robot Ethic?"
                  http://www.i-r-i-e.net/inhalt/006/006_full.pdf

Week Fourteen   **Speed, Acceleration, Going Faster and Faster**

26 April   Small group discussion of term papers

28 April   Paul Virilio, Introduction, Parts One and Two, pp. 7-79

30 April   Virilio, Parts Three and Four, pp.83-167

Week Fifteen

3 May   End of semester course wrap-up
                  "What is technology?" revisited
                  Research paper due

7 May   Final, 1:30 PM to 3:30 PM