

PHIL 4310: Philosophy of Technology

Syllabus

Fall 2010

Course Information

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Prerequisite: PHIL 1301, PHIL 2316, PHIL 2317 or permission of the instructor.

This course is upper-level course in philosophy and assumes basic familiarity with the problems, modes of inquiry, and major traditions of mainstream philosophy, though no particular familiarity with any philosophical specializations are assumed. As an upper-level course in the humanities, it presupposes the basic skills of reading, analyzing, and writing at an academic level. Students unused to reading and writing about difficult, sometimes fairly technical material are urged to consult with the professor early and often.

Course Description

The goal of this course is to teach you to think *critically* about the nature of technology and its role in our lives and our society. In part this requires instilling a healthy skepticism about two common, unreflective positions on technology: (1) the fanatical techno-boosterism of the popular science and technology press, in which technology is seen as the key to heaven on earth, and (2) a knee-jerk, doom-and-gloom luddism and technology-bashing. While there is much to appreciate and much to be critical of in modern technology, both appreciation and criticism ought to be thoughtful and well-grounded.

This course will focus on four major sets questions: (1) What is technology? How do we define it, study it philosophically, understand its relation to nature and humanity? (2) What is the relation of science to technology? Are they wholly distinct, or are modern science technology best understood under the shared heading of “technoscience.” What can we learn about one from the other? (3) What is the impact of technology on society and ethics? How should we think about this impact? Where is technology beneficial, and where is it problematic? (4) What is the impact of technology on human lives, ordinary, cognitive, and aesthetic? Does it degrade or improve? Does it make us smarter or hold us back? Do art and technology serve fundamentally different goals, or do they have important features in common?

Student Learning Objectives/Outcomes

- Students will analyze and interpret a significant body of primary works in philosophy of technology.
- Students will develop their ability to read, analyze, and write about complex texts.
- Students will demonstrate knowledge of the major questions and traditions in the philosophy of technology.
- Students will reflect on the socially responsible creation and use of technology, and create a project to further that end.
- Students will be able to critically analyze and discuss the nature of, value of, and challenges to technology as an intellectual and cultural institution.

Textbooks and Materials

Required

Codes in [brackets] used to specify reading assignments.

- Dusek, *Philosophy of Technology: An Introduction* [D]
- Kaplan, *Readings in Philosophy of Technology* [K]
- Ray Kurzweil, *The Age of Spiritual Machines* [ASM]
- Electronic reserves at <http://utdallas.docutek.com/eres/> [ER]

Suggested

- Scharff & Dusek, *Philosophy of Technology: The Technological Condition*
- Technology and Values: Essential Readings, ed. Craig Hanks
- Shrader-Frechette, *Technology and Values*

Course Schedule

Note: The introductory text by Val Dusek provides a general overview of the field, but its chapters rarely track the topical approach we will taken in the class. It is recommended that you read the full text cover-to-cover early in the course, and continue to use it as a general reference. I have indicated where particular chapters are useful to particular weeks, but you are free to read the book in its ordinary order.

Introduction

1. What is philosophy?

Read: TBA [ER]

Assignments: Email professor, join wiki, create profile

2. Why *philosophy* of technology?

Read: Kaplan, "Introduction" [K], Dusek, "What is Technology?" [D:2], Drengson [ER]

Unit 1 — What is Technology?

3. Heidegger's philosophy of technology
[Starting end of class 9/1, finishing start of class 9/15]
Read: Heidegger [K: Chapter 1], Dreyfus [K:2], Idhe [ER], "Phenomenology, Hermeneutics, and Technology" [D:5] *Bonus Reading:* Borgmann [K:5]
4. Marcuse and Critical Theory [9/15-9/17]
Read: Marcuse [K:3], "Rationality, Technological Rationality, and Reason" [D:4], *Bonus Reading:* Feenberg [K:10]
5. Pragmatism
Read: Hickman [K:4], Dewey [ER]
Assignment: Meet w/ your professor outside of class prior to this date.
Due: Term Paper Prospectus
6. Machines and Intelligence
Read: *Age of Spiritual Machines*, Prologue & Part 1 [ASM]
Midterm Exam: 9/29

Unit 2 — Science and Technology

7. Science/Technology or Technoscience?
Read: Pitt [K:34], Latour [K:36], Hacking [ER], "Philosophy of Science and Technology" [D:1]
8. Latour on Human-Nonhuman Symmetry
Read: Latour [K:11], "Social Constructionism and Actor-Network Theory" [D:12]

Unit 3 — Technology and Society

9. Technology, Cognition, and Human Nature
Read: Clark [ER], Hutchins [ER], "Human Nature" [D:8]
Attend: Lecture by Andy Clark, 10/20 7:30pm, Davidson Auditorium (SOM) – arrive at least 30 min in advance. (In lieu of class on that day.)
Due: Research Paper 10/18
10. Technology, Values, Ethics
Read: Lowrance [ER], Jonas [K:12]
11. Technology & Politics
Read: Winner [K:17], "Technocracy" [D:3]
Bonus Reading: Jasanoff [K:38], Sclove [K:19], Feenberg [K:10]
12. Futurism: *The Age of Spiritual Machines*
Read: Part 2 & 3 [ASM]
13. Applications to Information Technology

Read: Berry [ER], Zuboff [ER]

14. *Group Presentations*

Summary and documentation due at the beginning of Monday class.

Unit 4 — Art and Technology

15. Useful, Beautiful, Natural, and Artificial [incl. 12/6]

Read: McDermott [ER], Dewey [ER], Feyerabend [ER]

Final Exam: F 12/10 at 2:00pm

Grading Policy

Graded Assignments

Your grade will depend on the following assignments (dates are approximate):

Homework Assignments (5%) Brief assignments given a few times during the semester.

Class Participation and Citizenship (10%) The quantity and quality of your intellectual contribution to class discussions, to close readings of the text undertaken in class, and participation in in-class assignments and activities, as well as how much you contribute to a productive and fair community of learning.

Midterm Exam (20%) In-class, format to be discussed at least a week prior.

Research Paper (25%) Assignment to be given during first 4 weeks. Contribution to some major debate in the philosophy of technology, requiring outside research.

Group Project and Presentation (20%) In groups of 1–4, you will do something to promote socially responsible technology. You will write a 300–500 word summary of your project, and give a brief in-class presentation. Your project will be evaluated according to effort, informedness (theoretical and practical), effectiveness, and creativity.

Final Exam (20%) In-class, format to be discussed at least a week prior.

Evaluation Standards

The following is a clarification for the purposes of this course of the University's official policy with respect to grading standards.

- An **A** grade indicates *excellent* work. **A** work has something to say and says it well. It displays a subtle and nuanced understanding of the text, develops arguments clearly and effectively, and reflects insightfully on the course material. It often rises above other work in terms of creativity and sophistication,

or it may add something valuable to the discussion that goes beyond merely fulfilling the letter of the requirements. Only few, minor mistakes are present.

- A **B** grade indicates *good* work. Such work displays a clear understanding of the text, develops arguments consistently towards a clear claim, and is thoughtful and careful. The presence of serious errors must not impair the clarity of an argument or the overall understanding of a text. **B** work is in many ways successful, but lacks the sophistication or originality of **A** work.
- A **C** grade indicates *adequate* work. It shows an adequate understanding of the key parts of the text. Arguments aim at a central claim, though they may rely on unsupported or insufficiently developed ideas. More serious errors may be present, so long as the central claims and basic understandings are not undermined.
- Work which deserves a grade less than **C** will display some of the following problems: it fails to show adequate understanding of the text; it fails to understand the assignment; it fails to articulate a coherent or adequate argument; it fails to reflect on the content of the course; it displays such pervasive grammatical errors as to be highly obscure in meaning.

+/- grades *will* be assigned

Course & Instructor Policies

A Word About Note-Taking & Devices in the Classroom

Be mindful about your note-taking strategies in class. Extensive note-taking in class is discouraged, especially in those parts of class meetings that are not primarily lecture-based (a majority of the class). Taking notes on every word said in class is no guarantee of good performance in the course can interfere with activities that make a greater contribution to your performance: listening, consulting the text, and participating in class discussion. Of course, the proper proportions will depend on your individual learning style.

These considerations should likewise lead you to be mindful about the use of laptop or handheld computer in class. Abuse of such devices is widespread and deleterious of your own learning and to the community of learning within the classroom. If you feel more comfortable taking notes on a computer than on paper, I suggest you take the habit of turning off your wireless in the classroom. If you find reasons that having wireless on can be productive, I suggest you take steps to prevent yourself from common online distractions. All students in the class are asked to encourage their peers to be good classroom citizens in this regard.

Late Work / Make-up Exams

No late work or make-up exams will be allowed without consent of the professor *prior* to the due/exam date, except in situations where University policy requires it.

Class Attendance

While reading and writing are crucial parts of the course, the central philosophical activity is live discussion. While class will occasionally involve bits of lecture, this is merely an instrument to a more well-informed discussion and other structured activities. *Attendance is thus considered **mandatory**.* Missed classes will count against your participation grade, and egregious absenteeism will be grounds for an **F** in the course at the professor's discretion. In-class assignments and activities likewise cannot be made up unless the professor agrees to it before the class is missed. Disruptive late arrivals or early departures are poor classroom citizenship and will also negatively impact your participation.

Classroom expectations

You are expected to have read the assignments *before* class, and it would be to your benefit to also read them again after class. You are expected to bring *all* of the texts assigned for each day's class, and have them available to refer to. You are expected to listen respectfully to the professor and your fellow students, and participate in class discussions and activities.

**Further standard University policies can be found at
<http://go.utdallas.edu/syllabus-policies>**

***These descriptions and timelines are subject to change
at the discretion of the Professor.***