

Philosophy of Technology

Course code: PHI 285

Semester and year: Fall 2019

Day and time: Mondays, 11:30 – 14:15

Instructor: Ivan Gutierrez

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Consultation hours: Mondays, 14:15 – 14:45

Credits US/ECTS	3/6	Level	Introductory
Length	15 weeks	Pre-requisite	None
Contact hours	42 hours	Course type	GCC / Civilization HSC Required / Optional

1. Course Description

The aim of this course is to help orient students within the philosophical dimensions of technology and thereby develop an ability to think critically about the nature of technology and its role in our lives and in society.

Technology is thought to both expand and stunt our abilities, foment and imperil democracy and enable us to better care for and bring to ruin the world we live in. How can we best analyze and assess such conflicting views? Doing so entails developing a nuanced understanding of the positions held by the leading thinkers who have contributed to the philosophy of technology throughout history.

The course will focus on three major sets questions: (1) What is technology? How do we define it, study it, understand its relation to nature and humanity? (2) What is the relationship between technology our societal concerns such ethics, politics and the environment? How should we think about this relationship? Where is technology beneficial, and where is it problematic? (3) What is the impact of technology on our lives? Does it degrade or improve? What does the future hold?

2. Student Learning Outcomes

Upon completion of this course, students should be able to:

- distinguish the positions of leading thinkers who have contributed to the philosophy of technology throughout history and explain arguments for and against those positions;
- compare and contrast the different philosophical themes in the philosophy of technology and make coherent arguments based on a solid grasp of those themes;
- apply philosophical tools to critically assess current and emerging technologies
- develop a nuanced, well-considered and independent viewpoint on present-day discussions in the philosophy of technology
- navigate challenging philosophical texts
- relate our own lived experience to philosophical themes that shed light on our relationships to technology

3. Reading Material

Required Materials

- Reader available on course website

Recommended Materials

- Robert C. Sharff & Val Dusek, eds., *Philosophy of Technology – The Technological Condition: An Anthology, 2nd Edition* (Wiley-Blackwell, 2014).
- David M. Kaplan, ed., *Readings in the Philosophy of Technology* (Rowman & Littlefield, 2004).
- Craig Hanks, ed., *Technology and Values: Essential Readings* (John Wiley & Sons, 2009).

4. Teaching methodology

Students will be required to think, participate in class discussions and write. There will be weekly writing assignments.

5. Course Schedule

Date	Class Agenda
Sep. 2	Topic: Introduction Description: Class Information, Discussion on Class Expectations, Introduction to the course: historical perspectives Reading: None Assignments/deadlines: None
Sep. 9	Topic: Technology and Human Nature Description: Reading: <ul style="list-style-type: none">▪ Ortega y Gasset: "Man the Technician"▪ Mumford: "Tool Users vs. Homo Sapiens and the Megamachine"▪ Haraway: "A Cyborg Manifesto"▪ Latour: "A Collective of Humans and Non-Humans" Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time
Sep. 16	Topic: Technology and Science Description: Reading: <ul style="list-style-type: none">▪ Carnap, Hahn and Neurath: "The Scientific Conception of the World: The Vienna Circler"▪ Kuhn: "Paradigms and Anomalies in Science"▪ Lowrance: "The Relation of Science and Technology to Human Values" Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time
Sep. 23	Topic: Technology and Ethics Description: Reading: <ul style="list-style-type: none">▪ Jonas: "Technology and Responsibility"▪ Verbeek: "Cultivating Humanity: Towards a Non-Humanist Ethics of Technology"▪ Nissenbaum: "Values in Technical Design"▪ Holtug: "Genethics" Assignments/deadlines: Review storyline of Shakespeare's <i>Hamlet</i>
Sep. 30	Topic: Technology, Politics and Power

	<p>Description: Reading:</p> <ul style="list-style-type: none"> ▪ Foucault: "Panopticism" ▪ Feenberg: "Democratic Rationalization: Technology, Power and Freedom" ▪ Winner: "Do Artifacts Have Politics?" ▪ Habermas: "Technical Progress and the Social Life-World" ▪ Sunstein: "Democracy and the Internet" <p>Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time</p>
Oct. 7	<p>Topic: <i>Koyaniskaatsi</i> Description: Discussion of film in the context of course concerns Reading:</p> <ul style="list-style-type: none"> ▪ None <p>Assignments/deadlines: None</p>
Oct. 14	<p>Topic: Midterm exam Description: Reading: None Assignments/deadlines: Midterm checklist review</p>
Oct. 21	Mid-term break
Oct. 28	Holiday – Independent Czechoslovak State Day
Nov. 4	<p>Topic: Technology and the Environment Description: Reading:</p> <ul style="list-style-type: none"> ▪ Devall and Sessions: "Deep Ecology" ▪ Tiles: "Environmental Science and Technology" ▪ Light: "Urban Ecological Citizenship" <p>Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time</p>
Nov. 11	<p>Topic: Technology and Artificial Intelligence Description: Reading:</p> <ul style="list-style-type: none"> ▪ Turing: "Computer Machinery and Intelligence" ▪ Searle: "The Chinese Room Argument" ▪ Dennett: "Consciousness in Human and Robot Minds" <p>Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time</p>
Nov. 18	<p>Topic: Technology and Virtual Realities Description: Reading:</p> <ul style="list-style-type: none"> ▪ Nozick: "The Experience Machine" ▪ Baudrillard: "The Precession of the Simulacra" ▪ Kurzweil: "Twenty-First Century Bodies" <p>Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time</p>
Nov. 25	<p>Topic: The Future of Mind and Humanity I Description: Reading:</p> <ul style="list-style-type: none"> ▪ Clark & Chalmers: "The Extended Mind" ▪ van den Hoven: "Information Technology, Privacy, and the Protection of Personal Data" ▪ Brey: "Human Enhancement and Personal Identity"

	Assignments/deadlines: Readings for week as per syllabus, questions for focus by class time
Dec. 2	Topic: The Future of Mind and Humanity II Description: Reading: <ul style="list-style-type: none"> ▪ Chalmers: "The Singularity: A Philosophical Analysis" ▪ Birkerts: "Into the Electronic Millenium" ▪ Bostrom: "The Future of Humanity" Assignments/deadlines:
Dec. 9	Topic: <i>Transcendental Man</i> Description: <ul style="list-style-type: none"> ▪ Discussion of film in the context of course concerns Reading: None Assignments/deadlines: None
Dec. 16	Topic: Final Exam / Final essay due Description: Reading: None Assignments/deadlines: Final exam or hand in final essay

6. Course Requirements and Assessment (with estimated workloads)

Assignment	Workload (average)	Weight in Final Grade	Evaluated Course Specific Learning Outcomes	Evaluated Institutional Learning Outcomes*
Attendance and Class Participation	75 hours (in class + reading and preparation)	10%	Skill in discussing philosophical topics with peers.	1,2,3
Weekly writing assignments	25 hours	30%	Ability to engage with reading and focus in on key concepts.	1,2,3
Midterm exam	25 hours	30%	Ability to demonstrate knowledge acquired and apply knowledge creatively.	1,2,3
Final exam OR Analytic essay	25 hours	30%	Final exam: Ability to demonstrate knowledge acquired and apply knowledge creatively.	1,2,3
			Final essay: Ability to apply knowledge creatively and present a structured, extended philosophical argument.	1,2,3
TOTAL	150	100%		

*1 = Critical Thinking; 2 = Effective Communication; 3 = Effective and Responsible Action

7. Detailed description of the assignments

Attendance and class participation:

Students are required to do the assigned readings in advance of the class and attend classes regularly (this includes active participation in class debates). Students are also expected to be on time and follow the rules and ethics of a university seminar (see below).

Assessment breakdown

Assessed area	Percentage
Attendance	30%
Engagement in class discussions	30%

Coming to class having done readings	30%
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Weekly writing assignments (questions for focus):

Students will be required to choose three questions based on scheduled readings from a list posted on NEO each week and answer them in 100 words each. The questions are meant to focus reading on key concepts. Question sets are due by the beginning of class time on the date they are due (with the 2 exceptions detailed below). There will be a total of 12 question sets, but only 10 will be graded. So, if a student hands in more than 10 only the highest 10 grades will be factored into this part of the total grade for the course. The two question sets on the films can be handed in at any time until the end of the semester, though if students want feedback in time for the midterm and final, they must be handed in at least two days before the relevant exam.

Assessment breakdown

Assessed area	Percentage
Engagement with the readings	35%
Handling of questions	30%
Key concepts	20%
Analysis	15%

Midterm exam:

The midterm exam will test students' knowledge of factual information, their understanding of key concepts and their ability to engage with ideas with insight and creativity.

Assessment breakdown

Assessed area	Percentage
Specific information	15%
Ideas – identification, definition and explanation	30%
Analysis and application of concepts	30%
Implications, creativity	25%

Final exam:

Students who choose to take the cumulative final exam will be tested on their knowledge of factual information, their understanding of key concepts and their ability to engage with ideas with insight and creativity.

Assessment breakdown

Assessed area	Percentage
Specific information	15%
Ideas – identification, definition and explanation	30%
Analysis and application of concepts	30%
Implications, creativity	25%

Final essay:

Students who choose to do the final essay will write a 5-page (1,200–1,500 word) essay drawing a connection between one of the issues seen in class and a current state of affairs.

Assessment breakdown

Assessed area	Percentage
Content	50%

Organization	25%
Analysis	15%
Language & style	10%

8. General Requirements and School Policies

General requirements

All coursework is governed by AAU's academic rules. Students are expected to be familiar with the academic rules available in the Codex and Student Handbook and to maintain the highest standards of honesty and academic integrity in their work.

Electronic communication and submission

The university and instructors shall only use students' university email address for communication. It is strongly recommended that any email communication between students and instructors take place in NEO LMS.

Each e-mail sent to an instructor that is about a new topic (meaning not a reply to an original email) shall have a new and clearly stated subject and shall have the course code in the subject, for example: "COM101-1 Mid-term Exam. Question".

All electronic submissions are carried out through NEO LMS. No substantial pieces of writing (especially take home exams and essays) can be submitted outside of NEO LMS.

Attendance

Attendance is required. The university recommends, as a minimal policy, that students who are absent 35 percent of the course should be failed (or administratively withdrawn from the course if the absences are excused).

Absence excuse and make-up options

Should a student be absent from classes for relevant reasons (illness, serious family matters), s/he must submit to the Dean of Students an Absence Excuse Request Form supplemented with documents providing reasons for the absence. The form and documents must be submitted within one week of the absence. If possible, it is recommended the instructor be informed of the absence in advance. Should a student be absent during the add/drop period due to a change in registration this will be an excused absence if s/he submits an Absence Excuse Request Form along with the finalized add/drop form.

Assignments missed due to unexcused absences cannot be made up which may result in a decreased or failing grade as specified in the syllabus.

Students whose absence has been excused by the Dean of Students are entitled to make up assignments and exams provided their nature allows for a make-up. Students are responsible for contacting their instructor within one week of the date the absence was excused to arrange for make-up options.

Unexcused absences

Students are allowed two unexcused absences. Absences above this number may result in failure of the course.

Late work: No late submissions will be accepted – please follow the deadlines.

Electronic devices

Any electronic devices (phones, tablets, laptops...) may be used only for class-related activities (taking notes, looking up related information...). Any other use will result in being marked absent and/or being expelled from the class. No electronic devices may be used during the tests.

Eating is not allowed during classes.

Cheating and disruptive behavior

If a student engages in disruptive or other conduct unsuitable for a classroom environment of an institution of learning, the instructor may require the student to withdraw from the room for the duration of the activity or for the day and shall report the behavior to the Dean.

Students engaging in behavior which is suggestive of cheating (e.g. whispering or passing notes) will, at a minimum, be warned. In the case of continued misbehavior the student will be expelled from the exam and the exam will be marked as failed.

Plagiarism and Academic Tutoring Center

Plagiarism is "the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work." (Random House Unabridged Dictionary, 2nd Edition, Random House, New York, 1993)

Turnitin's White Paper 'The Plagiarism Spectrum' (available at <http://go.turnitin.com/paper/plagiarism-spectrum>) identifies 10 types of plagiarism ordered from most to least severe:

1. CLONE: An act of submitting another's work, word-for-word, as one's own.
2. CTRL-C: A written piece that contains significant portions of text from a single source without alterations.
3. FIND-REPLACE: The act of changing key words and phrases but retaining the essential content of the source in a paper.
4. REMIX: An act of paraphrasing from other sources and making the content fit together seamlessly.
5. RECYCLE: The act of borrowing generously from one's own previous work without citation; To self plagiarize.
6. HYBRID: The act of combining perfectly cited sources with copied passages—without citation—in one paper.
7. MASHUP: A paper that represents a mix of copied material from several different sources without proper citation.
8. 404 ERROR: A written piece that includes citations to non-existent or inaccurate information about sources
9. AGGREGATOR: The "Aggregator" includes proper citation, but the paper contains almost no original work.
10. RE-TWEET: This paper includes proper citation, but relies too closely on the text's original wording and/or structure.

As the minimum policy the types of plagiarism from 1 through 8 results in the failing grade from the assignment and must be reported to the Dean. The Dean may initiate a disciplinary procedure pursuant to the Academic Codex. Allegations of bought papers and intentional or consistent plagiarism always entail disciplinary hearing and may result in expulsion from AAU.

If unsure about technical aspects of writing, students are encouraged to consult their papers with the tutors of the AAU Academic Tutoring Center. For more information and/or to book a tutor, please contact the ATC at: <http://atc.simplybook.me/sheduler/manage/event/1/>.

Students with disabilities

Students with disabilities are asked to contact their instructor as soon as possible to discuss reasonable accommodation.

9. Grading Scale

Letter Grade	Percentage*	Description
A	95 – 100	Excellent performance. The student has shown originality and displayed an exceptional grasp of the material and a deep analytical understanding of the subject.
A-	90 – 94	
B+	87 – 89	Good performance. The student has mastered the material, understands the subject well and has shown some originality of thought and/or considerable effort.
B	83 – 86	
B-	80 – 82	
C+	77 – 79	Fair performance. The student has acquired an acceptable understanding of the material and essential subject matter of the course, but has not succeeded in translating this understanding into consistently creative or original work.
C	73 – 76	
C-	70 – 72	
D+	65 – 69	Poor. The student has shown some understanding of the material and subject matter covered during the course. The student's work, however, has not shown enough effort or understanding to allow for a passing grade in School Required Courses. It does qualify as a passing mark for the General College Courses and Electives.
D	60 – 64	
F	0 – 59	Fail. The student has not succeeded in mastering the subject matter covered in the course.

* Decimals should be rounded to the nearest whole number.

Prepared by and when: Ivan Gutierrez 12 December 2016

Approved by and when: School of Humanities and Social Sciences, May 2019