

2015 Spring Semester < Philosophy of Science and Technology > Syllabus

Hour: Tuesday and Friday 10:00~11:15

Room : OH 402

Professor: Wha-Chul Son

Office Hours: Mon. 10-12 / Thur. 13:00~14:15 or schedule an appointment by e-mail

1. Objectives of the Lecture

- To understand and experience philosophical thinking
- To compare philosophical approach to science and technology with ordinary idea on them
- To understand the importance of science and technology in modern society
- To analyze everyday experience in terms of science, technology and human beings
- To seek and consider the position and role of individual in technological society
- To read and understand philosophical text
- To evaluate other people's opinion logically and critically.
- To analyze everyday life in the light of what one has learned in the class

2. Introduction to the Lecture

The importance of science and technology in modern society has attracted philosophical attention, which engendered new sub-disciplines of philosophy: philosophy of science and philosophy of technology. This course provides introduction to these fields, dealing with main topics of these disciplines. Topics are as follows: (i) definition of science and technology, (ii) the objectivity and neutrality of science and technology, (iii) characteristics of science and technology compared with other human activities (iv) social, political and ethical implications of science and technology, etc. Another purpose of the lecture is to improve students' ability for communication, critical thinking and analytical thinking.

3. Main Texts

- Chalmers, What is This Things Called Science? 『과학이란 무엇인가?』 서광사
 - Jacques Ellul, Perspective on Our Age 『세계적으로 사고하고 지역적으로 행동하라』 대장간
 - Landon Winner, Whale and the Reactor 『길을 묻는 테크놀로지』 CIR.
 - Hans Jonas, 『기술 의학 윤리』 숲
 - Karl Popper, Conjectures and Reputations 『추측과 논박』 민음사
 - Thomas Kuhn, The Structure of Scientific Revolution 『과학혁명의 구조』 까치
- * Texts will be available at the photocopy shop in the library.

4. Evaluation

- Middle term exam and final exam: 25% each
 - In each session, 3 or 4 questions for exam will be provided. Exam consists of three randomly chosen questions from the pre-given list and one comprehensive question.
- Reading Assignments: 30%
 - There are 8 assignments. Students have to read the given text and write a short report according to the format provided.
 - The criteria for evaluation are: (i) how carefully and thoroughly one has read the given text and; (ii) how logically and critically one analyzed the text from one's own point of view.
 - Each student will get two feedbacks from the instructor out of 8 assignments.
- Question and Comment Sheets, Participation: 15%
 - After every session, one has to submit a sheet of question and comment.
- Debate: 5%
 - All students will have to join in debates during the class. Groups for debate will be organized.
- A few optional and additional assignments will be given and minimum reward will be granted.

5. Weekly Plan

			Reading Assignments
1 st Week	3/3	Introduction to the Course	
	3/6	What is Philosophy?	
2 nd Week	3/10	Academic Integrity	
	3/13	Science & Technology in Philosophy	
3 rd Week	3/17	What is Science?: Traditional Views	Chalmers, ch. 1 & 2
	3/20	What is Observation?	
4 th Week	3/24	Experiment	Chalmers, ch. 3 & 4
	3/27	The Problem of Induction	
5 th Week	3/31	The Problem of Demarcation	Popper, Ch 1
	4/3		
6 th Week	4/7	Scientific Revolution	Kuhn, Ch 3-4
	4/10		
7 th Week	4/14	The Objectivity of Science	
	4/17	The Influence of Philosophy of Science	
8 th Week	4/21,24	Mid-term exam	
9 ^h Week	4/28	Technology and Philosophy	Jonas ch.1
	5/1	Technology as a Gestell	
10 th Week	5/5	No Class - Public Holiday	
	5/8	No Class -Festival	
11 th Week	5/12	Traditional and Modern Technology	Ellul, ch. 2-3
	5/15	Autonomous Technology	
12 th Week	5/19	Social construction of Technology	
	5/22	Technology and Politics	Winner, Ch. 2
13 th Week	5/26	Democratizing Technology	
	5/29	Post-Humanism	To be decided
14 th Week	6/2	Post-Humanism	
	6/5	Post-Humanism	
15 th Week	6/9	21 st Century Homo-Faber	
	6/12	21 st Century Homo-Faber	
16 th Week	6/16,19	Final Exam	

6. Special Notes

- English should be no obstacle to attend the class. This is a philosophy class, not English. Students whose mother tongue is Korean are encouraged to take this course. The lecture will be given in English, but students are free to use Korean for their assignments, exams, and study outside of class. All reading materials are available both in English and in Korean. Every measure within the capacity of the instructor will be taken to assist non-native English speaker
- Appropriate measures will be taken in order to support students with physical challenges or other difficulties.
- The weekly plan is subject to change according to the instructor's professional decision. Thoughtful and constructive suggestions for change by students are welcome, too. The instructor is determined, however, to resist against all unreasonable and ungrounded political pressures by others concerning the content of this lecture.
- Recording of the lecture is allowed on three conditions. (i) Student must send an e-mail agreeing with the condition and get a written permission. (ii) Student should not use the recorded data apart from personal study. (iii) Student must delete or destroy the recorded data when the semester is over.
- Plagiarism of all kinds is not tolerated. Those who do not keep the academic integrity will be strictly instructed according to the university regulation.