

### Doctorado en Filosofía

## The impending self-destruction of human civilization

Periodo Académico : First semester of 2025

Créditos : 6 Reguisito : -

Horario : To be determined Fechas : To be determined

Horario Atención

Estudiantes : Thursday, 15:00-17:00

Profesor : Wolfhart Totschnig < wolfhart.totschnig@mail.udp.cl>

### I. DESCRIPTION

The progress of science and technology is a progress of our control over nature, of our ability to harness natural forces. This ability is generally used for constructive ends, but it can also be employed for destruction. Thus, along with helpful tools and machines, the progress of science and technology brings into existence ever more powerful weapons. Moreover, this same progress makes the manufacture of the existing types of weapons ever easier and cheaper. In this way, it puts ever more destructive power into the hands of ever smaller groups of people.

This basic feature of technological progress poses an existential problem for humanity. It suggests that our civilization will eventually destroy itself with the ever more powerful devices and methods that are being developed. There is not just one, but three distinct ways in which human civilization may perish through its own technology: 1) A lunatic might destroy the world intentionally, in a terrorist attack. 2) A scientist might destroy the world unintentionally, through a laboratory accident. 3) Two or more states might destroy the world as they fight each other, in a global war.

The problem is that, as long as technological progress continues, and unless drastic changes are made in how human society is organized, each of these three modes of doom becomes ever more probable.

In this seminar, we will analyze this problem in its various aspects and discuss possible ways of solving—or at least mitigating—it. Our discussion will be based on the contributions of several authors who have raised the problem since the invention of nuclear weapons in the middle of the 20th century (Orwell, Jaspers, Hoerner, Dummett, Bostrom, Rees, Ord, etc.).

In order to offer the students an opportunity to practice and improve their (academic) English, the course will be entirely in this language: The readings are in English, the discussions in the classroom will be in English, and the assignments, too, are to be written in English.

# II. OBJECTIVES

The main objectives of this course are

- to familiarize the students with a philosophical topic of great importance, namely the risk that human civilization will destroy itself through the technologies that it develops;
- to foster a constructive discussion about how to address this risk;
- and to help the students improve their (academic) English in reading, writing, and speaking.

## III. METHODOLOGY

The sessions of the course will begin with a brief introductory presentation by the professor in which the historical and philosophical context of the text to be discussed in the session will be laid out. This introductory presentation will then give way to a joint discussion, animated and led by the professor, of the principal ideas and arguments of the text.

Throughout the course, the students will practice academic writing in English. They will write five short "think pieces" (one every two sessions) and a longer final essay (see section "Assignments" below for details).

The professor will be available two hours per week, on Thursday from 15:00 to 17:00, for individual consultations.

### IV. CONTENTS

See section "Description" above.

### V. ASSIGNMENTS

The students will be expected to complete the following assignments:

- Five short "think pieces" (one page or 400 words *maximum*), one every two sessions, on some aspect of the readings that the student finds particularly interesting or questionable.
- A final essay of 8 pages or 3000 words *maximum* on a topic chosen by the student. The students are invited to consult with the professor about their topic before writing the essay.

# VI. SCHEDULE

1. To be determined Topic: Introduction to the topic and organization of the

course

Reading: -

2. To be determined Topic: The general situation

Reading: Bostrom, "Existential risks"

3. To be determined Topic: The threat of a nuclear holocaust, part 1

Reading: Orwell, "You and the atom bomb"; Jaspers, The atom bomb and the future of man, selections

Submission of the first think piece

4. To be determined Topic: The threat of a nuclear holocaust, part 2

Reading: Wiesner & York, "National security and the

nuclear-test ban"

5. To be determined Topic: Civilizational self-destruction as solution to the

Fermi paradox, part 1

Reading: Hoerner, "Population explosion and interstellar

expansion"

Submission of the second think piece

6. To be determined Topic: Civilizational self-destruction as solution to the

Fermi paradox, part 2

Reading: Cooper, "Bioterrorism and the Fermi Paradox";

Sotos, "Biotechnology and the lifetime of technical

civilizations"

7. To be determined Topic: On how to take notes (methodological session)

Reading: -

Submission of the third think piece

8. To be determined Topic: Possible solutions to the situation, part 1

Reading: Dummett, "Ought research to be

unrestricted?"; Joy, "Why the future doesn't need us"

9. To be determined Topic: Possible solutions to the situation, part 2

Reading: Bostrom, "The vulnerable world hypothesis"

Submission of the fourth think piece

10. To be determined Topic: Possible solutions to the situation, part 3

Reading: Rees, Our final century, selections

11. To be determined Topic: Possible solutions to the situation, part 4

Reading: Ord, *The precipice*, selections

Submission of the fifth think piece

12. To be determined Topic: Review and conclusion

Reading: -

To be determined Submission of the final essay

### VII. BIBLIOGRAPHY

Bostrom, Nick. 2002. "Existential risks: Analyzing human extinction scenarios and related hazards." *Journal of Evolution and Technology* 9 (1). http://www.jetpress.org/volume9/risks.html (accessed January 12, 2025).

——. 2014. *Superintelligence: Paths, dangers, strategies*. Oxford: Oxford University Press.

—. 2019. "The vulnerable world hypothesis." Global Policy 10 (4): 455-476.

Bostrom, Nick, and Milan M. Ćirković, eds. 2008. *Global catastrophic risks*. Oxford: Oxford University Press.

Cooper, Joshua. 2013. "Bioterrorism and the Fermi Paradox." *International Journal of Astrobiology* 12 (2): 144–148.

Dummett, Michael. 1981. "Ought research to be unrestricted?" *Grazer Philosophische Studien* 12: 281–298.

Häggström, Olle. 2016. Here be dragons: Science, technology and the future of humanity. Oxford: Oxford University Press.

Hoerner, Sebastian von. 1975. "Population explosion and interstellar expansion." *Journal of the British Interplanetary Society* 28: 691–712.

Jaspers, Karl. 1963. *The atom bomb and the future of man.* Translated by E. B. Ashton. Chicago: The University of Chicago Press.

Joy, Bill. 2000. "Why the future doesn't need us." Wired 8 (4): 238-263.

Ord, Toby. 2020. The precipice: Existential risk and the future of humanity. New York: Hachette Books.

Orwell, George. 1968. "You and the atom bomb." In *The collected essays, journalism and letters. Vol. 4: In front of your nose, 1945–1950*, 6–10. London: Secker & Warburg.

Posner, Richard A. 2004. *Catastrophe: Risk and response*. Oxford: Oxford University Press.

Rees, Martin. 2004. Our final century: Will the human race survive the twenty-first century? London: Arrow.

Sotos, John G. 2019. "Biotechnology and the lifetime of technical civilizations." *International Journal of Astrobiology* 18 (5): 445–454.

Vinge, Vernor. 2006. Rainbows end. New York: Tor.

Wiesner, Jerome B., and Herbert F. York. 1964. "National security and the nuclear-test ban." *Scientific American* 211 (4): 27–35.

Yudkowsky, Eliezer. 2008. "Artificial intelligence as a positive and negative factor in global risk." In *Global catastrophic risks*, edited by Nick Bostrom and Milan M. Ćirković, 308–345. Oxford: Oxford University Press.