

**Technology and Human Values**  
**Syllabus**  
**REL 4173**  
**IDS 4920-U07**  
**Tuesdays, 2:00-4:40.**  
**PC 244**

After the data-processing and robotics revolutions, the rapid development of genetic engineering and the globalization of markets, neither human labor nor the natural habitat will ever be what they once were.

(Felix Guattari, *Three Ecologies*, 43)

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**COURSE DESCRIPTION**

Is technology, like art, simply a product of human beings being human? Can technology only be understood as tools used by humans to make the rest of the natural world instrumental to human Ends? Or, might technology be better understood as something that is also a part of nature? The backlash to the Industrial Revolution found in the Romantic Era left many of the Romantics (proto-environmentalists) wary of technology. The Luddite thinking of many environmentalists can be attributed to the romantic desire to “re-capture” a nature that was free of human culture and technology so that human beings can get in touch with their true selves. The Luddite response to technology is understandable when one thinks of Chernobyl, Hiroshima, Nagasaki, *Silent Spring*, the human caused 6<sup>th</sup> great extinction era, and global climate change. Furthermore, there are many good reasons to be critical about the advance in genetic manipulations, nanotechnologies, and the general belief that developments in technology are inherently moving us toward a better and brighter future. Somewhere between “luddite thinking” and “positivistic” thinking lies the huge grey area surrounding most technological developments. Both a rejection of technology as “unnatural” and an embrace of technology as “improving upon nature” take humans outside of the rest of the natural world. This course will examine the nature-human-technology relationship as a continuum rather than as somehow distinct, ontological entities in relationship to one another. In examining the grey areas between nature-human-technology, it is important to look not only at the environmental and social-justice issues surrounding technology, but also at how technologies shape our very humanity, our meaning-making

practices, our value-systems, and our imaginations. In other words, how are technologies shaping human and planetary becoming? This course will address these types of questions from religious, ethical, and philosophical perspectives.

## **AIM OF THE COURSE**

To explore how technologies shape human animals, earth others, and the planetary future from ethical, religious, and philosophical perspectives.

## **LEARNING OUTCOMES**

This course will familiarize students with religious, ethical and philosophical debates surrounding technology and technological developments. It will provide students with the tools to think critically about the multiple issues raised by technology.

## **REQUIREMENTS**

Recognizing that there are many different learning styles, these requirements are designed to provide you with a variety of ways in which you can demonstrate your engagement with the materials in the course.

### **1. Class Participation—20%**

The first step to doing well in this class is to show up! You can't be a part of the learning community if you are not present. If you have to be absent from the course, please notify me ahead of time. Any more than two absences (unless there are extenuating circumstances) will result in a lowering of your participation grade. One absence is a free-bee. The second you may use the "get out of class" free card that I am providing on the first day of class.

The second step to doing well in this course is to read the materials. I trust that you will read the materials for each week's class. But just for fun, there may be a few, in class, pop-quizzes throughout the semester if the instructor feels that people are not reading.

The third step to doing well in the class is to speak up during course discussions. I realize that we all exist on a spectrum between introversion and extroversion, but remember that the classroom is as good as all of the voices therein. We all lose if we don't hear your voice at some point(s) throughout the semester.

The classroom is a community of learners. That is, we are all in the process of critically engaging the lectures and course materials together. Learning should be a collaborative process and it will take all of us to learn this semester. Having said that there are some ground rules that should be followed in course discussions and assignments.

1. Confidentiality: Sometimes we are exploring serious issues in the course that may be hard to speak about or give voice too. I expect that students will respect one another's privacy in this course and allow room for this type of exploration.
2. Trust and Respect: The classroom is a learning community and it is only as good as the relationships of the people that make up the classroom. Give your classmates the benefit of the doubt before jumping to conclusions about what is said. Also, be sure to state your opinions, questions, ideas and beliefs in a way that is not intentionally disrespectful to others in the class.
3. Academic Honesty. In all written materials, students will be expected to cite sources. Plagiarizing and "Copying" from other students may result in a failing grade. Grading for written assignments will follow the Rubric that is handed out on the first day and posted on Blackboard.

4. Students should be aware of everyone in the classroom and enable each person to contribute to the conversation. Likewise, each participant should refrain from dominating class discussion.
5. In order to facilitate dialogue, on discussion days we break out into small groups.

## **2. Mid-Term Exam—30%**

On lectures, readings, and class discussions through week 7. This exam will be given in the first half of class on **week 8, February 23.**

## **3. Class Presentation—20%**

Each student is expected to research and present on the readings during one week of class. Depending on the number of students in the course, this can be done alone or in small groups. The idea is to make the course readings relevant to contemporary events. So use of case studies from newspapers and magazines, movies, you-tube clips, guest speaker's on the given topic, etc. are highly encouraged. We will choose these dates during **week 2, (January 12)** of class.

## **4. Final Test or Paper—30%**

Each student is required to either take a final exam (for the materials from week 8 until the end of the course) or turn in a final paper. The exam will be multiple choice and essay. The paper should be at least 10-12 pages and should include at least one of each resource from the following media: journal, book, Internet. For those of you who want to write a paper, please provide me with a 250-word description of your paper along with at least one resource by **week 9, March 2.** (Note: If you chose to write a paper, or think you might like to write a paper, you must submit something to me by this deadline. However, if you submit a paper proposal and change your mind after the date, please let me know and you are welcome to take the exam).

## **GRADING SCALE**

A	96-100	C	72-77
A-	91-95	C-	71, 70
B+	89, 88	D+	69, 68
B	82-87	D	62-67
B-	80, 81	D-	60, 61
C+	79, 78	F	59 and below

## **REQUIRED TEXT**

David Noble, *The Religion of Technology: The Divinity of Man and the Spirit of Invention.* (Penguin, 1999)

Noreen Herzfeld, *Technology and Religion: Remaining Human in a Co-created World* (Templeton Press 2009)

Aihwa Ong and Stephen J. Collier, *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems* (Blackwell, 2005)

Blackboard Readings Online.

## IMPORTANT WEB RESOURCES

Online Essays in Philosophy of Technology:

<http://commhum.mccneb.edu/philos/techessay.htm>

UNESCO's Ethics of Science and Technology Page (lot of other linked resources here):

<http://portal.unesco.org/shs/en/ev.php->

[URL\\_ID=1373&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/shs/en/ev.php-URL_ID=1373&URL_DO=DO_TOPIC&URL_SECTION=201.html)

Society, Religion and Technology Project: <http://www.srtp.org.uk/srtpage3.shtml>

Counter Balance (a ton of resources on technology, religion, and philosophy of technology):

[www.counterbalance.org](http://www.counterbalance.org)

## IMPORTANT DATES

January 12: Choose Presentation Dates

January 18: MLK Jr. Day

January 25: Anniversary of Kismet's first self-generated words

February 14, 1876: Bell Patent's telephone

February 15: Galileo's Birthday

February 14: Anniversary of Death of Dolly the Sheep

February 19: Copernicus Birthday

February 23: Mid-Term

March 2: Paper Topics Due (if writing final paper)

March 15-19: Spring Break

Week of April 19: Final Exam

October 1, 1969: ARPANET first run.

November 26, 1941: First Penicillin Vaccine Produced (by Moyer)

December 17, 1903: First Airplane Flight

## Schedule

(Please note: schedule and readings are subject to change!)

**Week 1 (January 5):** Introductions; Discussion of Syllabus and Requirements; Why Technology and Human Values? (Herzfeld Appendix)

# What is Technology?

**Week 2 (January 12): Religious Perspectives I**

Readings: Herzfeld, chapter 1, pp3-20; Noble, Introduction and chs. 1&2.

On-line Reading: Merchant, *Reinventing Eden*, 11-36.

*Choose Presentation Week*

**Week 3 (January 19): Religious Perspectives II**

Readings: Noble, chs. 3-7, pp. 35-100.

**Week 4 (January 26): Philosophical Perspective I**

Online Reading: Val Dusek, *Philosophy of Technology*, ch. 1 & 2, pp 6-37; Heidegger, "The Question Concerning Technology," 3-35.

**Week 5 (February 2): Philosophical Perspectives II**

Online Reading: Val Dusek, *Philosophy of Technology*, chs. 9, 10, 12, pp 136-175 and 198-210.

**Week 6 (February 9): Ethical Perspectives I**

Readings: Ong and Collier, Part I, pp 1-53.

**Week 7 (February 16): Ethical Perspectives II**

Readings: Ong and Collier, chs. 23 and 24, pp. 439-481

## Topics in Technology and Human Becoming

**Week 8 (February 23): Energy and Transportation: The Planetary Community**

Readings: Noble, chs. 8-9, pp103-142; Herzfeld, chapter 5, 125-140.

On-line Reading: Zygmunt Bauman, *Liquid Modernity*, chap. 3, pp.110-129.

*Mid-Term Exam in 1<sup>st</sup> half of class.*

**Week 9 (March 2): Artificial Intelligence and Robotics**

Readings: Noble, ch. 10, pp143-171; Herzfeld, ch 3, 56-90.

*Paper topic due (if writing a final paper)*

**Week 10 (March 9): Virtual Worlds Materializing?**

On-line Readings: Deleuze and Guattari, *A Thousand Plateaus*, pp. 39-74.

**March 16 Spring Break!!!**

**Week 11 (March 23): Genetics and Stem Cells**

Readings: Noble, ch. 11 and conclusion, pp172-208; Herzfeld, ch. 2, pp 21-55; Ong and Collier, ch 4, pp 59-78.

**Week 12 (March 30): Pharmaceuticals**

Readings: Ong and Collier, chs. 8 and 11, pp 124-144, 194-213.

Online Reading: Haraway, *Modest Witness*, Part I, pp. 1-20.

**Week 13 (April 6): Nanotechnologies and Epigenetics**

Readings: Herzfeld, ch 4, pp 91-124

On-line Reading: Haraway, Cyborg Manifesto, pp. 149-181.

**Week 14 (April 13): Bio-Politics and Human Becoming**

Readings: Ong and Collier, ch 9, 18, 20, pp 145-168, 337-353, and 373-390.

*Review for Exam; Course Evals; Wrap up*

**Final Exam TBA as Schedule is made available**