

San José State University
Department of Philosophy
PHIL 110: Science, Technology and Human Values, Section: 03
Fall 2018

Course and Contact Information

Instructor:	Jordan Liz
Office Location:	234 Faculty Office Building (FO)
Email:	Jordan.Liz@sjsu.edu
Office Hours:	12:00 PM-1:00 PM Tuesdays and Thursdays, 4:30PM – 5:30PM Thursdays, or by appointment
Class Days/Time:	1:30 PM-2:45 PM, Tuesdays and Thursdays
Classroom:	222 Boccardo Business Complex
Prerequisites:	Completion of core GE, satisfaction of Writing Skills Test, upper division standing Completion of, or co-registration in, 100W is strongly recommended
GE/SJSU Studies Category:	Area V: Culture, Civilization & Global Understanding

All information in this syllabus is subject to change based on the needs of the class. Any changes will be announced in class and/or communicated by email and/or on Canvas. Students are responsible for regularly checking their email and the Canvas site for this class.

Catalog Description

The aims, methods and world views of science and technology; such value issues as technological determinism, design aesthetics and moral implications of computer and other technologies

Course Description

Should we promote the use of gene editing technologies such as CRISPR? Are geoengineering technologies truly the only way to save the planet from further ecological destruction? Does the Internet truly better our lives? In this course, we will be concerned with addressing these sorts of questions. More specifically, this course examines the intricate relationship between science, technology and human values. As such, the first unit of this course focuses largely on the lived experiences of technology, and our attitudes – whether pessimistic, optimistic, or deterministic – concerning the future of technology. Next, we will examine philosophical issues arising from particular forms of technologies, including biotechnologies, geoengineering, robotics (e.g. nurse-bots and military robots) and artificial intelligence. Finally, we will turn our attention to the Internet and examine a variety of ethical, political and social issues that arise as a result of our increasing growing reliance of it. Topics here include the internet and socialization, distance learning, nihilism, cyber-attacks and cyberterrorism, bitcoins and cryptocurrencies, digital surveillance and hacktivism.

GE Learning Outcomes (GELO)

Upon successful completion of this course, students will be able to:

1. Compare systematically the ideas, values, images, cultural artifacts, economic structures, technological developments, and/or attitudes of people from more than one culture outside the U.S.
2. Identify the historical context of ideas and cultural traditions outside the U.S. and how they have influenced American culture
3. Explain how a culture outside the U.S. has changed in response to internal and external pressures

Course Learning Outcomes

Upon successful completion of this course, students will have:

1. Developed critical and logical thinking skills
2. Improved reading comprehension and writing skills
3. Fostered communication skills through philosophical discussions in class
4. Gained familiarity with certain key concepts and debates within the philosophy of technology and related fields
5. Developed skills and tools necessary for understanding the complex relationship between science, technology, individuals and society

Required Texts/Readings

All other texts are available on Canvas. These texts are considered required reading and you are expected to read the assigned texts before class and bring a printed or electronic copy to class.

Course Requirements and Assignments

All students are required to

- (A) attend class and participate in class discussions
- (B) complete all readings before class
- (C) complete eleven quizzes
- (D) complete three papers

Participation (10%)

Students are allowed up to three unexcused absences; afterwards, however, students will lose three points from their overall grade for each absence. Students with perfect attendance will receive extra credit on their overall grade.

Do note, merely attending class does not mean you will get participation credit! That said, if you are uncomfortable participating in class, you may write questions and comments about the readings and send them to me via e-mail one or two days before we discuss the reading in class. I will then read your question anonymously to the class. Also, you are welcome to meet with me during my office hours (or by appointment) to ask questions about the readings. I consider this a form of participation.

Additionally, at the end of each class period, students will be required to response to three questions:

- 1) Explain one concept or idea you learned from today's class
- 2) Describe one concept or idea you are unclear or confused about
- 3) What would you like to discuss in a future class(es)?

Submitting thoughtful and complete responses to these questions will also count towards the participation grade.

Quizzes (30%)

There will be regular online reading quizzes beginning August 30th. These quizzes may be accessed via Canvas – students will have from the end of class until the beginning of the next class to complete the quiz (e.g. Quiz #1 will open after class on Thursday, August 30th and will be due before the start of class on Tuesday, September 4th, see Course Schedule for more information). There will be eleven quizzes total and will consist of multiple choice and true or false questions. They will cover material from that session’s readings. The purpose of these quizzes is to assess how well students understand the basic ideas and concepts discussed in the readings and in class. I will drop each student’s lowest quiz grade at the end of the semester. Additionally, I reserve the right to give pop-quizzes if, in my judgment, students are not doing the readings.

Three Papers (60%)

There will be three papers in this course for each of the first three units (Understanding Science and Technology, Values in Applied Technologies, Society and the Digital World). For each paper, students will be able to choose from a number of prompts, which will be distributed in class. Students will also have the option to choose your own paper topic; however, these must be approved by me at least one week prior to due date.

The paper lengths, percentages and deadlines for each of these papers are as follows:

	Topic	Length	Percentage	Deadline
Paper #1	Understanding Science and Technology	2-3 Pages	10%	Sept 27 th
Paper #2	Values in Applied Technology	3-4 Pages	20%	Nov 1 st
Paper #3	Society and the Digital World	4-5 Pages	30%	Dec 13 th

Each paper must be typed, at least 1.5 spaced, and use 12-point font. I am willing to read drafts provided I receive them at least three days before the due date. **Plagiarized papers will be penalized.** Electronic copies of papers must be turned in via Canvas by 11:59 PM on the due date. You will receive electronic feedback on all papers. **Late papers will be penalized.**

If you need help writing a paper, please contact the University’s writing resource center, the San José State Writing Center. The Writing Center has two locations: drop-in tutoring sessions in 126 Clark Hall, and regularly schedule tutoring sessions on the second floor in the MLK Library. Summer 2018 hours are 10:00AM – 3:00PM, Mondays to Fridays. Writing Center may be reached at (408) 954-2308, or writingcenter@sjsu.edu.

San José State University Policy: “Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.”

Grading scale

A+	100	C+	77-79
A	94-99	C	74-76
A-	90-93	C-	70-73
B+	87-89	D+	65-70
B	84-86	D	60-64
B-	80-83	F	< 60

Communication

Any important announcements, advice, changes to the class schedule, etc. will be communicated by email or on the course homepage on Canvas. You are responsible to regularly check your San José State email account as well as the Canvas page for the class.

When you use email to contact me, you should compose your message professionally. Include a greeting and sign your name. I reserve the right to ignore you otherwise.

Use of Technology

The use of laptops and tablets, not cell phones, is acceptable if and only if the goal is meaningful participation in class. That is, you can use these devices to take notes or access electronic copies of reading assignments – which are not to be found on Facebook, Twitter, or similar sites. If you choose to use electronic copies of assigned text, make sure you have them ready on your class at the beginning of the class.

Please store your cell phones, mp3 players, iPods, etc. out of sight (i.e. in your bag). **If you are caught checking your phone, texting, or if your phone goes off during class, you will lose three points on your final exam grade each time.**

Student Technology Resources

Computer labs for student use are available in the Academic Success Center at <http://www.sjsu.edu/at/asc/> located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

Academic Integrity and Student Conduct

Expectations for academic integrity and student conduct are described in detail on the website of the Office of Student Conduct and Ethical Development (<http://www.sjsu.edu/studentconduct/>). Additionally, please take a look at the University's policy regarding Academic Integrity (<http://www.sjsu.edu/senate/docs/F15-7.pdf>).

Plagiarism and other forms of academic misconduct can result in an automatic failing grade for this course, or a report to the appropriate Academic Judiciary, or both. If you are feeling pressured for time or confused, do not cheat or plagiarize! Instead, come get help.

Disability Statement

I feel very passionately about the right of individuals with disabilities to participate fully in all social realms, including education. To that end, I am willing to work with students with disabilities to find ways to accommodate any special needs that arise in taking this course. First, however, you will need to register with Accessible Education Center (AEC). In addition to providing documentation of your disability and needs arising from it, AEC will also be able to provide you with services that I cannot and that may also be beneficial beyond the context of my class.

Any student who anticipates physical or academic barriers based on the impact of a disability is encouraged to speak with me privately. Students with disabilities should also contact the Accessible Education Center (AEC) at

110 Administration Building, (408) 924-6000. AEC coordinates access and accommodations for students with disabilities.

SJSU Peer Connections

Peer Connections, a campus-wide resource for mentoring and tutoring, strives to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. Students are encouraged to take advantage of their services which include course-content based tutoring, enhanced study and time management skills, more effective critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and a study space are also available for student use in Room 600 of Student Services Center (SSC). Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit Peer Connections website at <http://peerconnections.sjsu.edu> for more information.

Reading schedule

The following dates indicate reading assignments for the semester. Please be prepared to discuss the material each day. Changes, additions, substitutions, or cancellations may be expected during the semester. They will be announced in class and on the Canvas page for this class.

Week	Date	Readings and Assignments
1	Aug 21 st	Introduction to the Course
Unit I: Understanding Science and Technology		
1 Topic: Defining Technology	Aug 23 rd	Reading: Val Dusek, "What Is Technology? Defining or Characterizing Technology" in <i>Philosophy of Technology: An Introduction</i> , pp. 26-38
2 Topic: Human- Technology Relationship	Aug 28 th	Reading: Don Ihde, "The Phenomenology of Technics," in <i>Philosophy of Technology: The Technological Condition: An Anthology</i> , pp. 539-560
	Aug 30 th	Reading: Albert Borgmann, "The Device Paradigm" in <i>Technology and the Character of Contemporary Life</i> , pp. 40-48
3 Topic: Technological Determinism and Pessimism	Sept 4 th	Reading: Langdon Winner, "Do Artifacts Have Politics?" in <i>Philosophy of Technology: The Technological Condition: An Anthology</i> , pp. 668-680 Assignment: Quiz #1
	Sept 6 th	Reading: Herbert Marcuse, "New Forms of Control" in <i>One-Dimensional Man</i> , pp. 3-20
4 Topic: Technological Optimism I	Sept 11 th	Reading: Diane P. Michelfelder, "Technological Ethics in a Different Voice" in <i>Technology and the Good Life</i> , pp. 219-233 John Dewey, "Science and Society," pp. 199-205 Assignment: Quiz #2
	Sept 13 th	No Class
5 Topic: Technological Optimism II	Sept 18 th	Reading: Karl Marx and Friedrich Engels, "Capitalism and the Modern Labor Process," in <i>Philosophy of Technology: The Technological Condition: An Anthology</i> , pp. 74-87
	Sept 20 th	Reading: Catch-Up Day (No New Readings)
Unit II: Values in Applied Technologies		
6 Topic: Bio Technologies	Sept 25 th	Readings: Eric S. Lander, "Brave New Genome" in <i>Beyond Bioethics: Toward a New Biopolitics</i> , pp. 169-174 Nathaniel Comfort, "Can We Cure Genetic Diseases without Slipping into Eugenics?" in <i>Beyond Bioethics: Toward a New Biopolitics</i> , pp. 75-85 Assignment: Quiz #3

Week	Date	Readings and Assignments
	Sept 27 th	Reading: Lisa C. Ikemoto, “Reproductive Tourism: Equality Concerns in the Global Market for Fertility Services” in <i>Law and Equality: A Journal of Theory and Practice</i> , pp. 277-309 Assignment: Paper #12
7 Topic: Geo Engineering	Oct 2 nd	Readings: Evelyn Wright and Paul Pojman, “Sustainability and Technology Solutions in the Climate Policy Debate: The Case of Geologic Carbon Sequestration” in <i>Environmental Ethics: Readings in Theory and Application</i> , pp. 667-674 David W. Keith, “Engineering the Planet” in <i>Environmental Ethics: Readings in Theory and Application</i> , pp. 690-696 Assignment: Quiz #4
	Oct 4 th	Reading: Stephen Gardiner, “Is ‘Arming the Future’ with Geoengineering Really the Lesser Evil? Some Doubts about the Ethics of Intentionally Manipulating the Climate System” in <i>Climate Ethics: Essential Readings</i> , pp. 284-312
8 Topic: Robots	Oct 9 th	Reading: Aimee van Wynsberghe, “Designing Robots for Care: Care Centered Value-Sensitive Design” in <i>Science and Engineering Ethics</i> , pp. 407-433 Assignment: Quiz #5
	Oct 11 th	Reading: Robert Sparrow, “Killer Robots” in <i>Journal of Applied Philosophy</i> 24(1), pp. 62-77
9 Topic: Artificial Intelligence I	Oct 16 th	Readings: A.M. Turing, “Computing Machinery and Intelligence” in <i>Mind</i> 59(236), pp. 433-460 Assignment: Quiz #6
	Oct 18 th	Reading: Hubert Dreyfus and Stuart Dreyfus, “Why Computers May Never Think Like People” in <i>Readings in the Philosophy of Technology</i> , pp. 375-390
10 Topic: Artificial Intelligence II	Oct 23 rd	Readings: Ayanna Howard and Jason Borenstein, “The Ugly Truth About Ourselves and our Robot Creations: The Problem of Bias and Social Inequity” in <i>Science and Engineering Ethics</i> , pp. 1-16 Assignment: Quiz #7
	Oct 25 th	Reading: Catch-Up Day (No New Readings)
Unit III: The Digital World and Society		
11 Topic: The Internet I	Oct 30 th	Reading: Amos Guiora and Elizabeth Park, “Hate Speech and Social Media” in <i>Philosophia</i> 45(3), pp. 957-971
	Nov 1 st	Reading: Nicola Mößner and Philip Kitcher, “Knowledge, Democracy and the Internet” in <i>Minerva</i> 55(1), pp. 1-24 Assignment: Paper #2

Week	Date	Readings and Assignments
12 Topic: The Internet II	Nov 6 th	Readings: Hubert Dreyfus, “How Far is Distance Learning from Education” in <i>On the Internet</i> , pp. 25-48 Assignment: Quiz #8
	Nov 8 th	Reading: Hubert Dreyfus, “Nihilism on the Information Highway: Anonymity vs. Commitment in the Present Age” in <i>On the Internet</i> , pp. 72-88
13 Topic: Cyber Attacks and Cyber Terrorism	Nov 13 th	Readings: Elizabeth Minei and Jonathan Matusitz, “Cyberspace as a New Arena for Terroristic: An Updated Examination” in <i>Poiesis & Praxis</i> , pp. 163-176 Assignment: Quiz #9
	Nov 15 th	Reading: Gabriel Weimann, “Cyberterrorism: The Sum of All Fears?” in <i>Studies in Conflict and Terrorism</i> , pp. 129-149
14 Topic: Bitcoins and Crypto Currencies	Nov 20 nd	Reading: Claus Dierksmeier, “Just HODL? On the Moral Claims of Bitcoin and Ripple Users” in <i>Humanistic Management Journal</i> 3(1), pp. 127-131 Peter Seele, “Let Us Not Forget: Crypto Means Secret. Cryptocurrencies as Enabler of Unethical and Illegal Business and the Question of Regulation” in <i>Humanistic Management Journal</i> 3(1), pp. 133-139 Assignment: Quiz #10
	Nov 22 th	Thanksgiving Break – No Class
15 Topic: Digital Surveillance	Nov 27 th	Readings: Lois Beckett, “Everything We Know about What Data Brokers Know About You” in <i>ProPublica</i> , https://www.propublica.org/article/everything-we-know-about-what-data-brokers-know-about-you Michel Foucault, “Panopticism” in <i>Philosophy of Technology: The Technological Condition: An Anthology</i> , pp. 654-666
	Nov 29 th	Reading: Kevin Macnish, “Government Surveillance and Why Defining Privacy Matters in a Post-Snowden World” in <i>Journal of Applied Philosophy</i> 35(2), pp. 417-432 Titus Stahl, “Indiscriminate Mass Surveillance and the Public Sphere” in <i>Ethics and Information Technology</i> , pp. 33-39
16 Topic: Hacktivism	Dec 4 th	Readings: Candice Delmas, “Is Hacktivism the New Civil Disobedience?” in <i>Raisons Politiques</i> , pp. 63-81 Assignment: Quiz #11
	Dec 6 th	Reading: Catch-Up Day (No New Readings)
17 Finals Week	Dec 13 th	Assignment: Paper #3