San José State University
Aviation and Technology,
TECH/AE/ENGR/ME/CMPE 198,
Technology and Civilization
(GE Area V), Spring 2018

**Instructor:** Kelly A. Harrison

Office Location: IS 133D

**Telephone:** (408) (924-6597) \*\*Rarely used

Email: kelly.harrison@sjsu.edu \*\*Please allow 48 hours for responses M-F

Office Hours:

By appointment, via Zoom/Canvas, MW afternoons

Class Days/Time:

Online \*\*THIS COURSE DOES NOT MEET IN PERSON

Classroom: Canvas

Prerequisites: WST passing score (or equivalent waiver), core GE (A2, A3),

100W passed or co-requisite

GE Category: Culture, Civilization, & Global Understanding, Area V

### **Course Format: Online via Canvas LMS**

This course is entirely online using the Canvas Learning Management System, which is the standard at SJSU. You are responsible for posting your assignments to areas of Canvas (Assignments, Discussions). You may use mobile or tablet versions of the Canvas app, but you are responsible for making sure you can access all information and can upload and review all assignments, including peer-review assignments.

If you have technical problems with Canvas, contact the SJSU Help Desk. Your instructor cannot provide technical support. See the Week 1 Module for links to technical support resources.

You (students) must have reliable internet, a compatible browser, email, and solid technical skills. For information on what browsers are compatible with Canvas, see http://www.sjsu.edu/at/ec/canvas/index.html

### **Required Texts/Materials**

You may purchase new, used/rented, or online versions of these.



1. (REQUIRED) Technology and Society: Social Networks, Power, and Inequality, Second Edition by Anabel Quan-Haase ISBN 13: 9780199014712

https://global.oup.com/academic/product/technology-and-society-9780199014712?cc=us&lang=en&#

2. (REQUIRED) How We Got To Now, by Steven Johnson

Print: ISBN-13: 9781594632969. \$20.04 (Ebooks are fine)

Other research articles and readings will be posted on Canvas.



All students must have reliable internet and email access. For an online course, expect to log in at least three times a week (compressed for summer courses!) and spend 2-4 hours per log in doing class work.



### **Preferred Name & Preferred Gender Pronouns**

All students have the right to their name and pronoun (he, she, they, ze, etc.). For more information on pronouns, see: https://lgbtqia.ucdavis.edu/educated/pronouns.html

Class rosters and Canvas list students' legal names. I will gladly honor your request to address you by an alternate name or gender pronoun. You can set your preferred name (which is displayed in Canvas) by following these directions in My.SJSU: http://www.sjsu.edu/registrar/docs/Preferred\_name\_setting.pdf

## Lockdown browser, Turnitin.com, Criterion, Writer's Help: Learning technologies

Canvas uses what's called the Lockdown browser for quizzes. Make sure your computer can access the Lockdown browser. (See Canvas and the Canvas help.)

All major assignments will be reviewed for plagiarism using turnitin.com. I will also give you feedback to your research paper using the Turnitin.com interface. SJSU pays for access to the Writer's Help, an online writing guide. Please use that as a resource to help with your writing and researching skills. Also, our class also has access to a program called Criterion that helps you with grammar errors. Directions are on Canvas.

# **Course Description**

Catalog text:

History, development, and use of technology in different cultures. Technology's impact on society, global environment, the workplace, cultural values, gender roles, and newly industrialized countries of the world. (Prereq: Upper division standing, passage of WST and CORE GE, 100W or co-enrollment in 100W required). 3 units.

Students are strongly encouraged to satisfy GE Areas R, S, and V with courses from departments other than the major department. Completion of, or co-registration in, a 100W course is strongly recommended. A minimum aggregate GPA of 2.0 in GE Areas R, S, & V shall be required of all students Undergraduates must have successfully completed Core GE with at least a C grade (C- or below is not accepted) and must have passed the WST Exam or the 100A course. Because this class requires a significant amount of writing and research, 100W is strongly recommended as a prerequisite but may be accepted per instructor as a co-requisite.

ENGINEERS: Note that if you take this class concurrently with ENGR 100W, you will be writing somewhere near 40-50 pages of text this term. Past students warn against doing this.

#### **Final exam**

This course has a final reflection done online.

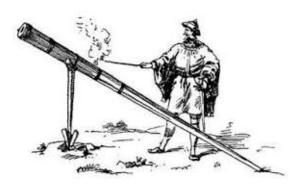
# **Purpose of this course**

Technology and Civilization is an SJSU Studies course in Area V: Culture, Civilization & Global Understanding that is designed to

- introduce you to the study and appreciation of the history and use of technology in society from an international and intercultural perspective, and
- increase your awareness of both the uncertainties and promises of technology as a creative human enterprise.

This course provides a comprehensive overview of the human dimension of technological change as it continually molds and shapes the nature of our culture, social institutions, and our personal and global environment.

Science and technology are often decried as pervasive and uncontrolled agents of social change. This course focuses on the roles individuals and groups play in the management and control of technological forces toward bettering the human experience. Together, we'll focus on the chronology of technology and its evolving role in shaping human history while using a critical lens to ask how technology affects and is affected by culture. This course helps you broaden your view of technology and its effect on society while building upon your university-level skills in reading, writing, speaking, critical thinking, research, and knowledge from Core GE.



You should leave this course with a comprehensive view of the interaction of technology and society.

### **SJSU Studies (Advanced GE)**

This course helps students become integrated thinkers who can see connections between and among a variety of concepts and ideas. An educated person can apply concepts and foundations learned in one area to other areas as part of a lifelong learning process. This course helps students to live and work intelligently, responsibly, and cooperatively in a multicultural society and to develop abilities to address complex issues and problem using disciplined and analytical skills and creative techniques.

The new SJSU senate policy S12-3 requires the university to be compliant with the Federal Regulation of the definition of the credit hour (1 unit):

"Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours [per unit] 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."

## Course Goals and Student Learning Objectives for GE Area V

	Description	How Achieved
LO1	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.	Readings, class discussion, How We Got to Now text/videos. Research Exercise. Canvas material: What are the cultural aspects to scientific and technological literacy? Quizzes and written assignments
LO2	Identify the historical context of ideas and cultural traditions outside the U.S. and how they have influenced American culture.	Readings, class discussion, <i>Guns, Germs, and Steel</i> videos, <i>How We Got to Now</i> , and Tech & Society textbook. Web-based unit on the history of technology. Canvas material: Assembly, The Nature of Work Today
LO3	Explain how a culture outside the U.S. has changed in response to internal and external pressures.	Readings, class discussion, videos. Research Exercise. Canvas material: The Scientific Method, The Industrial Revolution, The Industrialization of Society in the 19 <sup>th</sup> century, Scientific Management, Women at work before 1900 Quizzes and written assignment on technology, quality of life, and culture based upon readings.

## **Course Goals specific to Tech 198**

Goal	Description	How Achieved
1	Develop an understanding of technology's impact on cultural values and global mind-sets	Readings, QOL class activities, research exercise, GGS videos
2	Comprehend the core concepts of science and technology in contemporary society	Readings, multimedia activities on science and technology
3	Compare the development and use of technology in various countries around the world	Research exercise, Africa assignment
4	Analyze the interactions between gender, culture and technology in the history of technology	Readings, multimedia activities on gender and technology
5	Investigate the societal and technological relationships between gender and work	Readings, multimedia activities on Gender and Technology & Multimedia activities on Technology and Work
6	Analyze the mechanisms of technology transfer and its effects on other countries	Readings, technology transfer activities
7	Analyze technological developments, issues, and trends with respect to how these have altered the overall quality of life (QOL) in the United States and in other nations	QOL activities, personal use assignment/discussion
8	Review several contemporary technology innovations and developments and the ethics associated with responsible technology decision-making both for the United States as well as for other countries	Readings, ethics activities

# **Course Requirements and Assignments (workload)**

SJSU classes are designed such that in order to be successful, students are expected to spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

# Quizzes, class assignments, homework, participation

Throughout the semester, you will take quizzes on the assigned reading. You will also have various responses to reading and other short writing assignments. You will write a research paper.

Pay attention to due dates. On Canvas, the "Due" date is when the assignment is due for full credit. The "Available until" date is the last date I will accept LATE submissions with a grade penalty. **Note that some assignments are due without any late work accepted.** You are responsible for making sure your assignments upload properly. I will NOT give additional time or accept papers late because of technical issues. Late papers will be deducted one grade per day late.



#### Plagiarism is unacceptable

Plagiarism is using others' ideas and words without clearly acknowledging the source of that information. Sometimes it is tempting to copy other people's ideas from the Internet, textbooks, magazines, lectures, or even from other student papers, incorporating them into our own writing. As a result, it is very important that we give credit. If we don't give credit, we are taking these words and passing them off as our own. *Plagiarism* comes from a Latin word meaning a kidnapper/thief.

How Can You Avoid Plagiarism? To avoid plagiarism, you must give credit whenever you:

• Use someone else's direct words (use quotation marks around exact words that you are quoting—and give source at end of quotation marks)

Example: "In the midst of Silicon Valley and all over the globe, SJSU engineers are designing and building high impact innovations, with a particular focus on challenges to global sustainability" (Wei, 2011). [The full reference must appear in a References list.]

Use someone else's ideas, in your words, that are not common knowledge

Example: Through the Global Technology Initiative at SJSU, 25 students are selected each year to travel for two weeks to India or China, all expenses paid by GTI (College of Engineering, 2013). [Note this is not the exact words, so there are no quotation marks. The full reference must appear in a References list.]

Use specific statistics, graphs, drawings, that are not yours

Example: SJSU is ranked 8th overall among the West's top public universities offering bachelor's and

master's degrees, according to "American's Best Colleges"

(U.S. News & World Report, 2013).

Cite your own (or co-authored with a partner or team) work, especially in academic settings. If your company has copyrighted work that you have written as part of your job, or you share a patent or have previously published material that you have written, your company likely owns the copyright (not you or your team). If you are unsure about citations, ask your instructor (or your manager at work).

Plagiarism will result in a grade of F. Papers with plagiarism cannot be rewritten for credit. Your department chairperson will be notified. Plagiarism is a serious issue.

# Grading Policies: This course uses A-F grading with +/-

GE Area V policy: Students are strongly encouraged to take courses to satisfy GE Areas R, S, and V from departments other than their major department. Passage of the Writing Skills Test (WST) or ENGL/LLD 100A with a C or better (C- not accepted), and completion of Core General Education are prerequisite to all SJSU Studies courses. Completion of, or co-registration in, 100W is strongly recommended. A minimum aggregate GPA of 2.0 in GE Areas R, S, & V shall be required of all students. See <a href="University Policy S14-5">University Policy S14-5</a> at <a href="http://www.sjsu.edu/senate/docs/S14-5.pdf">http://www.sjsu.edu/senate/docs/S14-5.pdf</a>.

All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades. See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

This course uses the full range of A-F grades. Your grade is based on the total points earned in each unit, and these units are weighted. Letter grades break down as follows (shaded areas indicate you might have to repeat the course depending on your major's requirements):

98.0-100% = A+	93.0-97.9 = A	90.0-92.9= A-
87.0-89.9 = B+	83.0-86.9 = B	80.0-82.9= B-
77.0-79.9 = C+	73.0-76.9 = C	70.0-72.9 = C-
67.0-69.9 = D+	63.0-66.9 = D	60.0-62.9 = D-
Below 60.0 = F		

In the past, students who did not turn in assignments or routinely turned in assignments late received a grade below a C. It is far better to turn in a rushed assignment (even if you earn an F or receive few points) than it is to not turn one in at all and receive a zero!

#### **Grade distribution:**

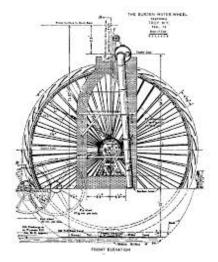
Assignment/Activity	Percent
Guns, Germs & Steel assignments	15
How We Got To Now assignments	15
Oxford Technology & Society assignments	15
Discussions, homework, other assignments	5
Units/Modules on Canvas	10
Research assignments	35
Final reflection/video presentation	5
TOTAL	100

# **Library Liaison for Engineering courses**

Crotty, Linda, Engineering Liaison Librarian Dr. Martin Luther King, Jr. Library

San Jose State University Phone: 408-808-2636

Email: linda.crotty@sjsu.edu (408) 808-2633 http://libguides.sjsu.edu/aviation\_technology



# **Technology 198, Spring 2018, Course Schedule**

### The schedule is subject to revision with notice via Canvas announcements.

Reading and video watching must be done PRIOR to taking the quiz or submitting your assignments. Note that NOT ALL QUIZZES AND DISCUSSION ASSIGNMENTS ARE LISTED HERE. Always check Canvas for assignments and due dates. Readings are not always in order of the textbook.

# Weeks correspond to those during a normal semester.

TS = Quan-Haase *Technology & Society* textbook

SJ = Johnson *How We Got To Now* trade book

Week W-W	Module/Unit, assignments, readings			
Unit: Nature of Science & Technology				
1 Jan 24-30	Introductions, Canvas materials Read: Week 1 module on Canvas, take practice exams <b>Due:</b> Post prereqs on Canvas, introduce yourself (Jan 31)Read announcements Begin research assignment Sign up for Criterion: <a href="http://www.sisu.edu/at/ec/criterion/">http://www.sisu.edu/at/ec/criterion/</a> Read: Unit 1: Nature of Science Module on Canvas Read: TS Chapter 1: The Technological Society & take quiz <b>Due:</b> Research: Worksheet Country #1 (Jan 31)			
2 Jan 31- Feb 7	Continue research: Comparison sheet Watch: Guns, Germs, and Steel (video, episode 1) on Canvas   Modules Read: TS Ch 2: Technology in Society: A Historical Overview & take quiz  Due: GGS 1 write up (50 pts) (Feb 7)  Due: Research: Worksheet Country #2 (Feb 7)  Discuss: Response Modes			
Unit: The History of Technology and Culture				
3 Feb 8-14	Watch: Guns, Germs, and Steel (video, episode 2) Read: Unit 2: History of Technology and Culture (Module on Canvas) Read: TS Ch 3: Perspectives Due: GGS 2 write up (50 pts) (Feb 14) Due: Research: Compare/contrast worksheet (Feb 14) Due: Research: Annotated bibliography (Feb 14)			
4 Feb 15-21	Watch: Guns, Germs, and Steel (video, episode 3) Read: TS Ch 5: Techno-Social Designing Online discussion: GGS Due: GGS 3 write up (50 pts) (Feb 21) Due: Research: Outline (Feb 21) Due: Research: Workshop/peer review of the outline (Feb 21)			
Unit: Technology Transfer and Cultural Issues & Research 1				
5 Feb 22-28	Read: TS Ch 6: Adoption and Diffusion Read: SJ Introduction, Ch 1: Glass Watch: How We Got To Now: Glass Due: Glass quiz and write up (Feb 28)			
6 March 1-7	Read: TS Ch 10: Tech-mediated Social Relationships Read: SJ Ch 2: Cold Watch: How We Got To Now: Cold Due: Cold write up (March 7)			

Week W-W	Module/Unit, assignments, readings			
Unit: Quality of Life (QOL) Issues				
7 March 8-14	Read: TS Ch 11: Surveillance Society QoL discussion Due: Research: Draft (March 8) and peer review (March 12)			
8 March 15- 21	Read: SJ Ch 3: Sound Read: TS Ch 9: Community in Network Society Watch: How We Got To Now: Sound Due: Sound quiz (March 21)			
	Unit: Technology and Work			
9 March 22- April 4	Read: SJ Ch 4: Clean Watch: How We Got To Now: Clean Read: Unit on Canvas Read: TS Ch 7: Labor of Technology Due: Clean quiz (April 4) Due: Research: Revised draft to Kelly (April 2)			
SPRING BREA	K IS MARCH 26-30			
10 April 5-11	Read: SJ Ch 5: Time Watch: How We Got To Now: Time Due: Time write up (April 11)			
	Unit: Technology, Ethics, and Society			
11 April 12-18	Read: TS Ch 12: Ethical Dimensions of Technology Read: SJ Ch 6: Light Watch: How We Got To Now: Light Due: Light write up (April 18)			
	Unit: Technology and Gender Issues			
12 April 19-25	Read: Unit on Canvas Read TS Ch 8: Technology and Inequality			
13 April 26- May 2	Watch: Video Arise Read TS Ch 4: Gendered Technology  Due: Arise reflection discussion (May 2)			
14 May 3-9	Africa maps exercise			
15 May 10-14	<b>Due:</b> Final Research revised paper (May 14) LAST DAY OF SCHOOL: May 14			
	FINAL REFLECTION: Friday, May 18 by 5 pm http://info.sjsu.edu/web-dbgen/narr/static/catalog/final-exam-schedule-spring.html			

# **University Policies**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at <a href="http://www.sjsu.edu/gup/syllabusinfo/">http://www.sjsu.edu/gup/syllabusinfo/</a>

