

## Course Schedule Information

Course Code / 時間割コード	881168
Semester / 開講区分(開講学期)	Fall and Winter Term
Day and Period / 曜日・時間	Wed2
Course Name (Japanese) / 開講科目名	社会の中の技術
Course Name / 開講科目名(英)	Critical Approaches to Technology in Society
Capacity / 定員	0
Room / 教室	人/本館 3 4 講義室
Course Numbering Code / ナンパリング	88INES9U100
Required/Optional / 必修・選択	履修対象：特別聴講学生 人科G30_
Type of Class / 授業形態	Lecture Subject
Credits / 単位数	2.0
Student Year / 年次	1
Instructor / 担当教員	KATIRAI Amelia Nur
Course of Media Class / メディア授業科目	Not Applicable

## Detailed Syllabus Information

Course Subtitle / 授業サブタイトル	Special Topic in Human Sciences A(Critical Approaches to Technology in Society)												
Language of the Course / 開講言語	English												
Learning Methods / 学習方法	<p>Listening and watching face-to-face/online class: Listening and watching a lecture, video, or demonstration, face-to-face or via online (e.g., attending a face-to-face lecture, watching an on-demand video)</p> <p>Reading: Reading books and academic papers (e.g., summarizing an academic paper, reading information on a website)</p> <p>Discussion: Learning through question-and-answer interactions and exchanges of opinions among students and between students and the instructor (e.g., pair/group discussion, online chat, one-on-one guidance for writing an academic paper)</p> <p>Research: Collecting information from books and academic papers; gathering and analyzing data by fieldwork (e.g., review of previous research, fieldwork)</p> <p>Presentation: Writing papers, making presentations, and creating works (e.g., report writing, oral/poster presentation, creation of works, portfolio development)</p>												
Course Objectives / 授業の目的と概要	<p>In this course, we will take artificial intelligence (AI) and related technologies as our case study and critically examine their place in society through four course modules. Emerging applications of AI including generative AI (e.g., large language models like ChatGPT and image generators) are increasingly in public awareness. Throughout this course, we will take a sociological approach to examine how these technologies are embedded in systems of social relationships, with a focus on issues of justice and equity. We will consider who may benefit from or be harmed by new technologies, including applications of AI that we interact with in our daily lives. Remembering that "critical" does not necessarily mean "negative," we will explore concepts that can assist in charting a more just and sustainable path forward.</p> <p>The ways in which our social world shapes and is shaped by new technologies cannot and should not be ignored. The aim in this course is to equip you with some of the knowledge and critical perspectives you will need to act as an informed citizen in these areas. To this end, the course will involve lectures, mini-workshops and discussions of case studies, and multimedia.</p>												
Learning Goals / 学習目標	<table border="1"> <tr> <td>1</td> <td>Gain knowledge about how technologies including AI shape and are shaped by society.</td> </tr> <tr> <td>2</td> <td>Apply knowledge about the social aspects of technologies to identify ways in which particular applications of AI may lead to benefit or harm.</td> </tr> <tr> <td>3</td> <td>Critically respond to common discourses about technology in society.</td> </tr> <tr> <td>4</td> <td>Reflect upon and challenge your own assumptions about technology in society.</td> </tr> <tr> <td>5</td> <td>Design possible solutions to issues related to technology in society.</td> </tr> <tr> <td>6</td> <td>Conduct research on topics of interest to you related to technology in society.</td> </tr> </table>	1	Gain knowledge about how technologies including AI shape and are shaped by society.	2	Apply knowledge about the social aspects of technologies to identify ways in which particular applications of AI may lead to benefit or harm.	3	Critically respond to common discourses about technology in society.	4	Reflect upon and challenge your own assumptions about technology in society.	5	Design possible solutions to issues related to technology in society.	6	Conduct research on topics of interest to you related to technology in society.
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Requirements, Prerequisites / 履修条件・受講条件	This course will be held in English, and involves active participation in classes and weekly reading assignments. If you are unsure if your English proficiency is sufficient, you can access samples of books written by the authors listed below.	
Attendance and Student Conduct Policy / 出欠席及び受講に関するルール		
Class Plan / 授業計画	1st	Title:MODULE 1 (Weeks 1 - 4): In this introductory module, we will get situated in the course, getting to know each other and the area of study. We will learn to apply a sociological lens to technology, seeing technologies as systems embedded in social relationships. We will also have a critical introduction to AI, which is the area of focus in this course. To close this module, we will place our study of AI in society in the context of the ongoing degradation of our planet, and question deterministic perspectives which see technological development as inevitable.
		Introductions
		Instructor:
		Independent Study Outside of Class:This course is designed to include the following independent work: 1. Readings will be distributed to you through CLE. You will be asked to make time to read the assigned reading (or the assigned parts) prior to the class. Readings will generally be around 20 pages in length, and are primarily recent book chapters or articles relevant to the course theme. 2. Each week, you will be asked to complete a brief “ Learning Log ” entry with a prompt to guide you, to help you engage critically with the course materials and readings. 3. You will be asked to complete a final Assignment Portfolio, on topics of interest to you, before the end of term. Details will be provided in the course.
	2nd	Title:MODULE 1 - Week 2
		A sociological perspective
		Instructor:
		Independent Study Outside of Class:
	3rd	Title:MODULE 1 - Week 3
		What is AI?
		Instructor:
		Independent Study Outside of Class:
	4th	Title:MODULE 1 - Week 4
		Our planet
		Instructor:
		Independent Study Outside of Class:
	5th	Title:MODULE 2 (Weeks 5 - 8): Technology is designed and applied in environments with fundamental and persistent inequalities. In this module, we will hone in on the interplay between AI and gender, race, and disability. We will take an intersectional approach throughout. In each session, we will start with a brief review of sociological perspectives on the topic, and then move on to case studies in relation to AI. We will close each session with critical discussions or a mini film
		Gender
		Instructor:
		Independent Study Outside of Class:
	6th	Title:MODULE 2 - Week 2
		Race
		Instructor:
		Independent Study Outside of Class:
	7th	Title:MODULE 2 - Week 3
		Health
		Instructor:
		Independent Study Outside of Class:
8th	Title:MODULE 3 (Weeks 9 - 11): We will take up particular applications of AI that have implications for our daily lives. We will look at how some of the inequalities discussed in Module 2 play out in these case studies. We will examine algorithms in health and care, at work, and in social and other media. We will have mini-workshops in weeks 9, 10, and 12, to help you to think through the implications of particular applications of AI for different stakeholders. Our film screening in Week 11 will be of a recent documentary film.	

		Care
		Instructor:
		Independent Study Outside of Class:
	9th	Title:MODULE 3 - Week 2
		Work
		Instructor:
	10th	Independent Study Outside of Class:
		Title:MODULE 3 - Week 3
		Media
	11th	Instructor:
		Independent Study Outside of Class:
		Title:MODULE 3 - Week 4
12th	Documentary film screening	
	Instructor:	
	Independent Study Outside of Class:	
13th	Title:MODULE 4 (Weeks 12 - 15): In this module, we will bring our course to a close by exploring concepts that can assist in charting a more just and equitable path forward.	
	Privacy	
	Instructor:	
14th	Independent Study Outside of Class:	
	Title:MODULE 4 - Week 2	
	Ethics	
15th	Instructor:	
	Independent Study Outside of Class:	
	Title:MODULE 4 - Week 3	
	Involvement	
	Instructor:	
	Independent Study Outside of Class:	
	Title:MODULE 4 - Week 4	
	Wrap-up	
	Instructor:	
	Independent Study Outside of Class:	

Textbooks / 教科書・指定教材  
Copies of the readings or links through which to access them will be provided through the weekly class pages on CLE.

Reference / 参考図書・参考教材  
We will draw on these and other books and recent academic articles. Readings and other resources will be provided.

- Aral, S., 2020. The hype machine. New York: Penguin Random House.
- Benjamin, R., 2019. Race after technology: Abolitionist tools for the New Jim Code. Cambridge: Polity Press.
- [Open access] Costanza-Chock, S., 2020. Design justice: community-led practices to build the worlds we need. Cambridge: MIT Press.
- Crawford, K., 2021. Atlas of AI: Power, politics, and the planetary costs of artificial intelligence. New Haven: Yale University Press.
- Mullaney, T. S., Peters, B., Hicks, M. & Kavita, P. eds., 2021. Your computer is on fire. Cambridge: MIT Press.
- O'Neil, C., 2016. Weapons of math destruction. New York: Penguin Random House.

Grading Policy / 成績評価	Evaluation Methods / 評価方法	Learning Log	Learning engagement	Assignment Portfolio		
	Learning Goals1	○	○	○		
Learning Goals2	○	○	○			
Learning Goals3	○	○	○			
Learning Goals4	○	○	○			
Learning Goals5	○	○	○			
Learning Goals6	○			○		

	Allocation of Marks / 評価割合	30%	10%	60%		
Additional Information on Grading / 成績評価に関する補足情報	Further detail about assignments, including rubrics, will be provided during the course and available to you through CLE. Feedback on all assignments--based on the designated rubrics--will also be provided to you following assignment submission.					
Reasonable Accommodation / 合理的配慮	<ul style="list-style-type: none"> <li>• If you need reasonable accommodation to participate in this class due to disability (including intractable disease and chronic condition), please contact the office for students with disabilities (e.g., Educational Affairs Section, Academic Affairs Section, Student Affairs Section) at your school/faculty or graduate school, or the Disability Advisory and Support Service Office of the Health and Counseling Center.</li> <li>• For more information, please visit the following website or contact the Disability Advisory and Support Service Office of the Health and Counseling Center. Website : <a href="https://acs.hacc.osaka-u.ac.jp">https://acs.hacc.osaka-u.ac.jp</a> Tel : 06-6850-6107 E-mail : <a href="mailto:campuslifekenkou-acs@office.osaka-u.ac.jp">campuslifekenkou-acs@office.osaka-u.ac.jp</a></li> </ul>					
Special Note / 特記事項	<p>Please note that there may be changes to course content. A detailed and up-to-date syllabus will be available to you through CLE.</p> <p>Accommodations are available for students who require them. Please consult the relevant university institutions as needed, and as much as possible, ensure that I am notified before the course begins, or as the</p>					
Office Hours / オフィスアワー	Office hours are by appointment. You can reach me at <a href="mailto:a.katirai.elsi@osaka-u.ac.jp">a.katirai.elsi@osaka-u.ac.jp</a> .					
Course Conducted by Instructors with Practical Experience / 実務経験のある教員による授業科目						

Instructor(s)		
1	Instructor Name / 教員氏名	Amelia Katirai
	Name (hiragana) / ふりがな	
	Affiliation, Title, Course / 所属・職名・講座名	Osaka University Research Center on Ethical, Legal, and Social Issues
	Office / 居室	
	Extension / 内線	
	E-mail / e-mail	<a href="mailto:a.katirai.elsi@osaka-u.ac.jp">a.katirai.elsi@osaka-u.ac.jp</a>