

Outline of Proposal for SDGs Online Cross-Registration: Online Exchange Program (OEP) focusing on SDGs							
General Information	Name of University/ Institution	Toyo University					
	Brief Introduction of the University/Institution	Toyo University is a comprehensive private university in central Tokyo. Toyo was selected for Top Global University Project by the Japanese government and has been striving for internationalization of the university. In the Faculty of Economics, students receive the opportunity to develop their individual interests through academic scholarship while acquiring a foundational education that can shape their future goals within the context of economics and society inside and outside Japan.					
	Country/Territory	Japan	City	Tokyo			
	Address	5-28-20 Hakusan, Bunkyo-ku	Telephone Number	+81-3-3945-7827			
	Fax Number	+81-3-3945-8533	Official University/Institution Website	https://www.toyo.ac.jp/			
	UMAP Contact Person	Name: International Affairs Office Organization/Office: N/A Email Address: ml-sgu@toyo.jp					
Program Information	Name of Subject	Science, Technology and Society		Name of Faculty	Faculty of Global and Regional Studies		
	Name of Department	Department of Global Innovation Studies					
	Program Description & syllabus	<p><b>[Course Purpose and Description]</b> Science &amp; Technology Studies (STS) is a dynamic interdisciplinary field: it is a result of the intersection of work by sociologists, philosophers, economists and other scholars studying the processes and outcomes of science and technology. Because it is interdisciplinary, the field is extraordinarily diverse and innovative in its approaches. This course aims first at introducing students to central ideas in STS. Through discussions of key concepts and case studies, we will explore how specific scientific facts or technologies are constructed, developed and diffused. We will then collectively explore in-depth several scientific and technological controversies (such as global warming, Artificial Intelligence (AI) impacts, or Covid-19 treatments). These topics will be the basis for in-class discussions (via the class forum), short essays and game-like applications. This course is related to SDGs: INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> <p><b>[Learning Objectives]</b> The objectives of this course are to:  <ul style="list-style-type: none"> <li>Gain a basic understanding of the theoretical principles behind the STS research field;</li> <li>Learn about the ways in which science, technology, and society influence one another;</li> <li>Reflect critically on technological innovations and their implications for society;</li> <li>Analyze different models of science and technology policy issues and compare their benefits and limitations;</li> <li>Improve reading, writing, and research skills.</li> </ul> </p> <p><b>[Schedule]</b> Mapping Science and Technology Studies            Session 1: Introduction: What is science and technology? - Lecture I            Session 2: The genesis of science studies: Meeting Karl Popper and Robert Merton - Lecture II            Session 3: Information vs. Knowledge vs. scientific research - Case Study            Session 4: Actor-Network Theory - Lecture III            Session 5: What about the scallops of St. Brieux - Readings and short essay</p> <p>What drives Science, Technology, and Innovation            Session 6: Invention, Innovation, and Technological Change - Lecture IV            Session 7: The Diffusion of Technology: S-shape - Case Study            Session 8: The Evolution of Science and Technology Policy: Reflections on the The Fourth Industrial Revolution, Society 5.0, and the Data-Driven Society - Lecture V            Session 9: The Commercialization of Scientific Research: The case of CRISPR - Case Study</p> <p>Engaging contemporary scientific issues: Meet the public            Session 10: Hydroxychloroquine and the French doctor - Case Study            Session 11: Scientific and Technological controversies: What about Covid-19 - Case Study            Session 12: AI and the generation of new knowledge: Case of ChatGPT - Lecture VI            Session 13: Fake news, BS and scientific fraud - AI generated content - Case Study            Session 14: Debate: How does AI impact the way we generate knowledge - Forum Discussion            Session 15: Debate: What current AI can and can't do, AI and big data - Forum Discussion</p> <p><b>[Instructional Methods]</b> ToyoNet-ACE will be used to communicate with the students. This class is a remote learning class. It will be delivered on-demand, all the content of the class will be available at the beginning of the quarter. Appointments will be available on demand. Through hands-on exercises and active participation, students will explore concepts addressed in the class while developing theoretical and analytical skills which will enable them to better grasp STS topics. Students will be encouraged to use creative tools to analyze and engage with complex STS issues.</p> <p><b>[Self-study before/after classes]</b> Students are expected to have read the assigned readings for a specific sessions, a detail schedule will be provided at the beginning of the quarter and the students will see all the deadlines. (Required time per class: 60-120 minutes) Post-lesson assignment tasks are expected to take approximately 120 minutes to complete.</p> <p><b>[Methods of Evaluation and Grading Criteria]</b> Participation: Students' participation grade will be based on their preparation for class, the quality of their participation in class discussions (online) and their responses to short quizzes and tests. (40%) Case studies: students will explore STS policy debates in which there is no right or wrong answer. They will research the topic and answer short essay questions. (30%) Research/Practice Paper: Each student will be assigned to research a STS issue related to the class. Students should submit a literature review that explores particular topics of interest to them. Grading will be based on the academic quality of the paper. (30%) Comply with Toyo University's Grading Criteria.</p> <p><b>[Pre-requisites]</b> Basic knowledge of innovation studies, sociology, and philosophy</p> <p><b>[Textbooks]</b> Sergio Simondon. 2010. An introduction to science and technology studies. 2nd ed. Chichester, U.K.: Wiley-Blackwell (¥1,592)</p> <p><b>[Reference Materials]</b> For each class, handouts, a reading list, and media supports will be given.</p>					
		Degree Level and/or Grade	Undergraduate		Language of Instruction	English	
		Number of Credits to Transfer (Timing of credit issuance)	University Credits	UTCS converted into University Credits	Definition of UTCS		
			2	—	The definition of UTCS is as follows: One (1) UTCS = 30 - 40 hours of student workload. This includes 13-16 academic hours of instruction. *FYI, please refer to UTCS Users' Guide on UMAP website. (http://umap.org/acta)		
		Means of Transmission (e.g. via Zoom, etc.)	Online		Number of Lectures	15	
		Number of class Hours	1.5		Total Teaching Hours	22.5hours	
		Independent Study Hours	45hours		Student's Total Workload	67.5hours	
		Program Fee	None				
		Requirement	Language Proficiency	We accept native English speakers and/or a certificate issued by the home institution if English is used as the medium of instruction.	Yes		
			GPA	N/A		Others (if any)	N/A
Program Schedule	Length			1Q			
	From	22-Sep-23		To	15-Nov-23		
	Day of week	Every Wednesday and Every Friday		Time of class(Standard Time)	16:30~18:00(JST)Wednesday 16:30~18:00(JST)Friday		
Participants	Number of acceptable participants	Unlimited					
Application Period	From	10-Jul-23		Until (Deadline)	24-Jul-23		
Certificate	The month you issue the certificate	The end of March/2024					
Others	If there are any other facts to inform, please specify.	N/A					