2025 年度シラバス

科目分類/Subject Categories			
学部等/Faculty	/工芸科学部 : /School of Science and Technology	今年度開講/Availability	/有 : /Available
学域等/Field	/全学共通科目 : /Program-wide Subjects	年次/Year	/ 2 年次 : /2nd Year
課程等/Program	/英語教育科目 : /English	学期/Semester	/前学期 : /First term
分類/Category	/ : /	曜日時限/Day & Period	/木 2 : /Thu.2

科目情報/Course Information				
時間割番号 /Timetable Number	10214201			
科目番号 /Course Number	10261004			
単位数/Credits	2			
授業形態 /Course Type	講義・演習 : Lecture/Practicum			
クラス/Class	c			
授業科目名 /Course Title	English for Sciences and Humanities A : English for Sciences and Humanities A			
担当教員名 / Instructor(s)	/(ｶﾞﾋﾞ ﾘﾍﾟﾃﾞｨ) : GABI LIPEDE			
その他/Other	インターンシップ実施科目 Internship	国際科学技術コース提供科目 IGP	PBL 実施科目 Project Based Learning	DX 活用科目 ICT Usage in Learning
			○	
	実務経験のある教員による科目 Practical Teacher			
科目ナンバリング /Numbering Code				

授業の目的・概要 Objectives and Outline of the Course	
日	
英	The future will belong to scientists who can collaborate not only with one another, but also with artificial intelligence—ideally while operating in a flow state or other high-performing state of consciousness. Increasingly, these optimal states—where we feel and perform at our best—will be techno-enabled: the AI interfaces themselves will help induce or support such states. Nevertheless, we must actively cultivate the human side of this equation to ensure that future collaborations remain fruitful, successful, meaningful, and ethical. In 2025, effective collaboration with other human beings includes communicating in English. English remains the lingua franca of science and global communication, and while this may change in the future, for now, English is essential. To this end, students will enrich their scientific vocabulary in English, particularly in chemistry and related fields. They will also develop their reading, comprehension, and academic presentation skills—skills that are crucial for effective communication in the sciences. In this course, we'll explore how scientific creativity arises—not only from computation, but from narrative reasoning, a uniquely human mode of thought. While computational reasoning dominates most training, narrative thinking is the crucible of scientific innovation. It cannot be replicated by algorithms alone. We'll also address urgent ethical questions in the physical and biological sciences. As your generation enters an era of accelerating breakthroughs, the ethical stakes may exceed even those of the atomic age. You must begin to grapple with these challenges now. Finally, we'll look at applied high-performance neuroscience—a growing field aimed at enhancing human potential in

	collaborative and AI-assisted work. Readings from leading research centers like Harvard and Oxford will help you understand how to optimize human performance,thereby enhancing the quality of your future collaborations with other scientists and AI.

学習の到達目標 Learning Objectives	
日	
英	Master concepts in the Fields of applied high performance neuroscience; bioethics; artificial intelligence and creativity studies Master "they say/I say" with is implications for reading comprehension, and academic presentation skills Learn how to use AI Socratically to turbo boost learning rather than outsourcing your thinking onto AI Understand the importance of narrative, thinking, as opposed to computational thinking in the sciences

学習目標の達成度の評価基準 / Fulfillment of Course Goals（JABEE 関連科目のみ）	
日	
英	

授業計画項目 Course Plan			
No.		項目 Topics	内容 Content
1	日		
	英	Intro	…
2	日		
	英	The Neuroscience of Intrinsic Motivation	…
3	日		
	英	Topic 1	…
4	日		
	英	Topic 2	…
5	日		
	英	Topic 3	Topic 3
6	日		
	英	Topic 4	…
7	日		
	英	Topic 5	…
8	日		
	英	Topic 6	…
9	日		
	英	Midterm Exam	…
10	日		
	英	Topic 7	…
11	日		
	英	Topic 8	…
12	日		
	英	Topic 9	…
13	日		
	英	Topic 10	…
14	日		
	英	Topic 11	…
15	日		
	英	Final Exam	…

履修条件 Prerequisite(s)	
日	
英	

授業時間外学習（予習・復習等） Required study time, Preparation and review	
日	"At our university, one unit of study time is 45 hours. Please complete pre-study and post-study for each class."
英	"Please note that KIT requires 45 hours of study from students to award one credit, including both in-class instructions as well as study outside classes. Students are required to prepare for each class and complete the review after each class."

教科書／参考書 Textbooks/Reference Books	
日	①松森靖夫監修、James Miller 執筆 『科学のキホンがこれならわかる！ 新版 英語対訳で読む「理科」入門』 （実業之日本社、2020 年） ISBN:978-4-408-33952-8 1000 円
英	

成績評価の方法及び基準 Grading Policy	
日	
英	Participation 10% Generative AI self tests and dialogues: 20% Presentation: The Myth of the Objective: your interests: 20% Final Film Project: 30% E-Learning: 20%

留意事項等 Point to consider	
日	
英	1.) Students who miss more than three classes will automatically receive a failing grade. 2.) Please note that the syllabus may be revised throughout the semester to better suit the needs and abilities of the class. 3.) You may occasionally be required to bring your PC or tablet to class; I will always inform you in advance so you can be prepared. The use of generative AI is permitted in this course, provided it is used in accordance with the Socratic method I will introduce during the first third of the semester. Relying on AI to do your thinking for you will result in a failing grade.