

Course number		U-LAS10 10023 LE55					
Course title (and course title in English)		Quest for Mathematics I-E2 Quest for Mathematics I-E2		Instructor's name, job title, and department of affiliation		Graduate School of Informatics Program-Specific Senior Lecturer,Li, Douglas	
Group	Natural Sciences		Field(Classification)		Mathematics(Foundations)		
Language of instruction	English		Old group	Group B		Number of credits	2
Number of weekly time blocks	1	Class style	Lecture (Face-to-face course)		Year/semesters	2025・Second semester	
Days and periods	Thu.3		Target year	Mainly 1st & 2nd year students		Eligible students	For liberal arts students
[Overview and purpose of the course]							
This class is an introduction to calculus for those who did not study "Mathematics III (of the Japanese high school standard)".							
[Course objectives]							
The goal of the class is to solve problems of the same level with those in the entrance examination for science students. An additional goal of this course is to give a chance to the students to present and discuss mathematics in English.							
[Course schedule and contents)]							
The course will cover the following topics, and each of them is read during 3-4 weeks:							
1. Limit of series and continuous functions							
2. Differentiation of elementary functions (for example: sine, cosine, exponential etc.)							
3. Brief introduction of the Riemann integral and differential equations							
4. Applications.							
Total : 14 classes, 1 Feedback session							
[Course requirements]							
None							
[Evaluation methods and policy]							
The evaluation of the course will take into account the following criteria:							
-homework (40%)							
-presentation (20%)							
-final report (40%)							
[Textbooks]							
Peter D. Lax 『Calculus With Applications』 (Springer)							

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[References, etc.]

(References, etc.)

加古孝 『自然科学の基礎としての微積分』（朝倉書店）

[Study outside of class (preparation and review)]

Exercises are given in class and students are required to solve them for clear understanding of the topics in class.

[Other information (office hours, etc.)]

High school text book "Mathematics III (高等学校 数学 III)" based on the Japanese high school standard is useful to understand of the subject of the class.

Office hours are not assigned and it is advisable to make comments willingly during and after the class.

[Essential courses]