科目ナンバリング U-LAS10 10023 LE55												
授業科目 <英訳>		Quest for Mathematics I-E2 Quest for Mathematics I-E2					当者所属 告・氏名 情報学研究科 特			特定講師 Li, Douglas		
群	自然科:	学科目群	<u>(</u>	分野(分類)	数学	△ (基礎)				用言語	英語	
旧群	B群	単位数	2単位	週コマ数	1コ	マ	授業	形態 講	義(義 (対面授業科目)		
開講年度・開講期	2024・後期 曜時限 2			3	配当	配当学年 きとして1・2		2回生	対象学:	生文系向		

[授業の概要・目的]

This class is an introduction to calculus for those who did not study "Mathematics III (of the Japanese high school standard)".

[到達目標]

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.

[授業計画と内容]

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

[履修要件]

特になし

[成績評価の方法・観点]

The evaluation of the course will take into account the following criteria:

- -homework (40%)
- -presentation (20%)
- -final report (40%)

[教科書]

Peter D. Lax Calculus With Applications (Springer)

[参考書等]

(参考書)

加古孝 『自然科学の基礎としての微積分』(朝倉書店)

[授業外学修(予習・復習)等]

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

[その他(オフィスアワー等)]

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.