| 科目ナンバリング | U-LAS00 10008 LE34 | | | | |
|---|---|---|---|---|---|
| 授業科目名<英訳> | Logic II-E2 :Inductive & Scientific Reasoning<br>Logic II-E2 :Inductive & Scientific Reasoning | 担当者所属職名・氏名 | 医学研究科　講師　SAHKER, Ethan Kyle | | |
| 群 | 人文・社会科学科目群 | 分野(分類) | 哲学・思想(基礎) | 使用言語 | 英語 |
| 旧群 | A群 | 単位数 | 2単位 | 週コマ数 | 1コマ | 授業形態 | 講義（対面授業科目） |
| 開講年度・開講期 | 2026・前期 | 曜時限 | 木4 | 配当学年 | 主として1・2回生 | 対象学生 | 全学向 |

**[授業の概要・目的]**

Students will develop applied scientific reasoning skills in Logic II. Inductive reasoning takes observations and infers a general “truth” from those observations. As an extension of the methods and principles used to identify and use reasoning skills, students will learn causal and probabilistic theories and methods for the evaluation of reasoning. Concepts and skills learned in this class will cover methodologies used within the humanities and health sciences.

This course has 3 aims:
(1) CONTENT: To gain basic knowledge of logic and reasoning: identifying propositions and arguments; evaluating logical fallacies, syllogisms, and deduction; and using symbolic representation as quantifiers of logic and reasoning.
(2) EXPOSURE: to expose you to different styles of education and thought. I am American and I teach in an American academic style. This may be different from what you have experienced.
(3) ENGLISH: While I do not grade heavily on English ability, it can only benefit you to have experience in English listening, speaking, reading, and writing. One difficulty in practicing a second language is the fear or anxiety about trying it. I know, because I am scared to use my bad Japanese, but it is getting easier the more I practice. My hope is that your English comfort level improves because of this class.

**[到達目標]**

(1) To acquire the ability to comprehend scientific arguments and inductive reasoning methods.
(2) To learn to evaluate scientific writing based on the presented reasoning and statistical conclusions presented.
(3) To develop an enhanced ability to apply scientific reasoning through conceptualization of a research project.

**[授業計画と内容]**

(1) Course overview and introduction to logic
(2-3) Analogy, legal and moral reasoning
(4-5) Methods for identifying causality
(6-7) Probability
(8-9) Statistical reasoning
(10-11) Hypothetical and scientific reasoning
(12-14) Evaluating science
Feedback

Logic II-E2 :Inductive & Scientific Reasoning(2)へ続く↓↓↓

Logic II-E2 :Inductive & Scientific Reasoning(2)

**[履修要件]**

特になし

**[成績評価の方法・観点]**

50% - Research Proposal Project
25% - Quizzes
25% - Class Participation

**[教科書]**

使用しない

**[授業外学修（予習・復習）等]**

Students are expected to complete assignments before class and come prepared to discuss the topics.

**[その他（オフィスアワー等）]**

Students may contact the instructor if they have questions and they may schedule an in-person appointment by email.

**[主要授業科目（学部・学科名）]**