科目ナンバリング	U-LAS00 10008 LE34				
授業科目名<英訳>	Logic II-E2 :Quantificational Logic and Deductions Logic II-E2 :Quantificational Logic and Deductions	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	2025・後期	曜時限	水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 inductive reasoning skills in Logic II. Inductive reasoning takes observations and infers a general truth from those observations. Inductive logic is the foundation of the scientific method. As an extension of the methods and principles used to identify and use reasoning, students will learn causal and probabilistic theories and methods for the evaluation of reasoning.
Concepts and skills learned in Logic II will cover methodologies used within the humanities and the sciences. Student will apply course content to developing a hypothetical research proposal based on any topic they are interested in doing. Research proposal examples include: effective gambling strategies, delicious foods, anime/manga techniques, soccer player health, etc. Students can choose anything as long as it is something they like to do.

Students will actively practice:
(1) developing methods of identifying cogent reasoning and causality
(2) logic applied to statistical and scientific reasoning applications
(3) evaluation of high quality indictive reasoning in scientific methods

[到達目標]

(1) To acquire the ability to assess an argument 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 understand scientific reasoning.

[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
(12-13) Evaluating science
(14) Review
(15) Final exam
(16) Feedback

Logic II-E2 :Quantificational Logic and Deductions(2)へ続く↓↓↓

Logic II-E2 :Quantificational Logic and Deductions(2)

[履修要件]

特になし

[成績評価の方法・観点]

40% - Research Proposal Project
20% - Quizzes
20% - Short Personal Reflection Paper
20% - 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. One short personal reflection paper will also be required.

[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）]