科目ナンバリング U-LAS70 10002 SE50											
授業科目名 <英訳>	ILAS Seminar-E2:What is light? (光って何?) ILAS Seminar-E2:What is light? 世当者所属職名・氏名 工学研究科 講師 DE Z										DE ZOYSA, Menaka
群	少人数群	単位数	数	2単位		週	週コマ数		マ	授業形態	ゼミナール (対面授業科目)
開講年度· 開講期	2024・後期	受講定員 (1回生定員)		15 (15) 人		配	当学年	主として1回生		対象学生	全学向
曜時限	木5		教室  共		共北3B	BB			使用言語	英語	
キーワード	Photonics / Light / Optics										

## [授業の概要・目的]

This seminar aims for students to learn about the fundamentals of light. Fundamentals of reflection, transmittance, interference, diffraction, emission, and absorption will be explained. Front-line technologies related to light control will also be discussed.

#### [到達目標]

- Understand the fundamentals of light.
- Learn about front-line technologies related to light control.

### [授業計画と内容]

- 1. Overview of the course, introduction to light (1 week)
- 2. Fundamentals of light, wave equation (4 weeks)
- 3. Reflection, transmittance, total internal reflection (3 weeks)
- 4. Explanation of interference, diffraction, light absorption, and emission (2 weeks)
- 5. Introduction/discussion of front-line light control technologies (4 weeks)
- 6. Feedback (1 week)

## [履修要件]

特になし

#### [成績評価の方法・観点]

Evaluation will be based on participation (30%), discussion (30%), and short reports (40%).

## [教科書]

使用しない

# [参考書等]

(参考書)

授業中に紹介する

## [授業外学修(予習・復習)等]

Students are required to do their short reports.

# [その他(オフィスアワー等)]

Office hours: Anytime by email, and appointments should be made via email or during the seminars.