

6. Applied Physics 応用物理系			AP-S1
授業科目名 Course Title	Introduction to Applied Physics II (Experimental Physics)	単位数 Credit	2
担当教員 Instructor	ASANO Takayuki, KUMAKURA Mitsutaka, MORIYASU Takeshi, NISHIUMI Toyohiko, YAMAGUCHI Yuusuke, FUJII Yutaka, ESCAÑO Mary Clare	開講学期 Semester	Spring
キーワード Keywords	Material engineering, Optical engineering, Far-infrared engineering	曜日/時限 Day & Time	Thursday, second period

授業概要 Course summary	
This course provides an Introduction to Applied Physics, especially Experimental Physics. This introduction mainly includes three kinds of experimental fields: (1) Material engineering, (2) Optical engineering, and (3) Far-infrared / Terahertz engineering. Each field has two or three themes, and an instructor of each theme has two classes.	
到達目標 Course goal	
After taking this course in introduction to applied physics, students obtain fundamental knowledge of physical / chemical phenomena and experimental techniques in applied physics research.	
授業内容 Course description	
01: Class guidance (ASANO Takayuki) <Material engineering> 02-03: Material synthesis and physical property (ASANO Takayuki) 04-05: Electrochemistry (NISHIUMI Toyohiko) 06-07: Magnetic resonance (FUJII Yutaka) <Optical engineering> 08-09: Interaction between light and matter (MORIYASU Takeshi) 10-11: Laser and its applications (KUMAKURA Mitsutaka) <Far-infrared / Terahertz engineering> 12-13: Introduction to high-power sub-terahertz wave generation and application (YAMAGUCHI Yuusuke) 14-15: Introduction to terahertz wave engineering (ESCAÑO Mary Clare)	
準備学習（予習・復習）等 Preparation / Review	
At least a one-hour review is necessary for each of the classes.	
授業形式 Class style	
Lectures with exercises will be mainly provided.	
成績評価の方法・基準 Method of evaluation	
Reports on each theme: 100 % If absences count five or more, the credit will not be given.	
教科書・参考書等 Textbook and material	

Handouts, including presentations, will be provided to students in each class.
受講要件・予備知識 Prerequisite
None
その他の注意事項 Note
This lecture will be conducted in person. If an infectious disease (such as COVID-19) spreads, it may be made online.