

<b>Course number</b>		U-LAS12 10021 LE57					
<b>Course title (and course title in English)</b>		A Guide to Modern Physics A-E2 A Guide to Modern Physics A-E2		<b>Instructor's name, job title, and department of affiliation</b>		Graduate School of Science Associate Professor, WENDELL, Roger	
<b>Group</b>	Natural Sciences		<b>Field(Classification)</b>		Physics(Foundations)		
<b>Language of instruction</b>	English		<b>Old group</b>	Group B		<b>Number of credits</b>	2
<b>Number of weekly time blocks</b>	1	<b>Class style</b>	Lecture (Face-to-face course)		<b>Year/semesters</b>	2024 • First semester	
<b>Days and periods</b>	Mon.3		<b>Target year</b>	Mainly 1st year students		<b>Eligible students</b>	For all majors
<b>[Overview and purpose of the course]</b>							
This course will discuss the fundamentals of classical (Newtonian) mechanics, the first step in understanding many phenomena in the natural world. Lectures will be discussion-oriented and will provide many opportunities for student's to improve their scientific English abilities. In addition, the end of the course will introduce students to topics in modern physics.							
<b>[Course objectives]</b>							
To learn and understand basic phenomena from fundamental physical principles and conservation laws.							
<b>[Course schedule and contents)]</b>							
Lectures on the basics of classical Newtonian mechanics will cover the following topics with each covered in two or three weeks:							
1) Principles of momentum, velocity, and acceleration 2) Equations of linear and rotational motion, applications 3) Conservation laws, work and energy 4) Gravitation and physical phenomena in our daily lives 5) Introduction to topics in modern physics, such as relativity and quantum mechanics							
<b>[Course requirements]</b>							
None							
<b>[Evaluation methods and policy]</b>							
Student's comprehension of the course material will be evaluated based on participation in in-class discussions (20 points), homework sets (worth 60 points total), and a final exam or report (20 points).							
<b>[Textbooks]</b>							
Not used							
<b>[Study outside of class (preparation and review)]</b>							
Will be presented in class							
<b>[Other information (office hours, etc.)]</b>							
Students interested in improving their scientific English are encouraged to join this course.							