Course number	U-LAS13 10008 LE60		
Course title (and course title in English)	Basic Organic Chemistry I-E2 Basic Organic Chemistry I-E2	Instructor's name, job title, and department of affiliation	Institute for Chemical Research Senior Lecturer,Amelie Perron

Group	Natural Sciences	Field(Classification)	Chemistry(Foundations)

Language of instruction	English	Old group	Group B	Number of credits	2

Number of weekly time blocks	1	Class style	Lecture (Face-to-face course)	Year/semesters	2025・First semester

Days and periods	Tue.5	Target year	Mainly 1st & 2nd year students	Eligible students	For science students

[Overview and purpose of the course]

This course is intended for Japanese and international students registered in natural science majors who are interested in learning chemistry in English.

Basic Organic Chemistry I explains the fundamental concepts of organic chemistry, aiming to help students understand the structures and properties of organic compounds. This course can be taken alone or in combination with Basic Organic Chemistry II.

[Course objectives]

Students will be able to analyze the structure of organic compounds and predicting their properties based on their bonding, atomic orbitals, hybridization state, intermolecular forces and resonance structures.

[Course schedule and contents)]

The semester will be divided as follows:

Week 1: Introduction to Organic Chemistry
Week 2: Atomic Orbitals
Week 3: Molecular Representations
Week 4: Geometry of Compounds
Week 5: Intermolecular Forces
Week 6: Resonance
Week 7: Mid-term Exam
Week 8: Acids and Bases (Part 1)
Week 9: Acids and Bases (Part 2)
Week 10: IUPAC (International Union of Pure and Applied Chemistry) Nomenclature (Part 1)
Week 11: IUPAC Nomenclature (Part 2)
Week 12: Conformations of Alkanes and Cycloalkanes
Week 13: Amino Acids and Proteins
Week 14: Classification and Structures of Carbohydrates
Week 15: Final Exam

Continue to Basic Organic Chemistry I-E2(2)↓↓↓

Basic Organic Chemistry I-E2(2)

[Course requirements]

None

[Evaluation methods and policy]

Evaluation will be based on class attendance and active participation (30%), mid-term exam (30%) and final examination (40%).

[Textbooks]

David Klein 『Organic Chemistry』 （Wiley） ISBN:1118452283（not mandatory）

[References, etc.]

（References, etc.）

Handouts will be provided at the beginning of each lecture.

[Study outside of class (preparation and review)]

Students should review the course materials after each class.

[Other information (office hours, etc.)]

Teaching Approach:

The new concepts are introduced in a skill-building format with practice problems (in class) and exercises (in class) to help students master the course material (no homework).

[Essential courses]