シラバス参照

科目名/Subject	【JYPE】Organic Chemistry
科目群/Categories	Faculty of Science
曜日・講時/Day/Period	Wednesday 4th (14:40-16:10)
開講年度/Year	2022
セメスター/Semester	Fall Semester
単位数/Credit(s)	2
担当教員(所属)/Instructor (Position)	TETSUO KIN (Assoc. Prof.)
対象/Eligibility	JYPE
使用言語/Language	English
備考/Notes	

授業題目/Class Subject	Fundamentals of Organic Chemistry
授業の目的と概要/Objectives and Summary of Class	This class object is to study the fundamentals of chemical structure and bonding, organic compounds, stereochemistry, organic reactions, and molecular orbitals for organic molecules. Associate professor Eunsang Kwon will give the lecture.
学修の到達目標/Goal of Study	The goal of this class is to understand the basics of chemical reactions and be able to apply them to typical organic reactions. In this course, students will learn the structure, reactivity of functional group, and physical properties of organic molecules.
授業内容・方法と進度予定/Contents and Class Schedule	1. Molecule Introduction & atoms & bonding 2: Polar Covalent Bonds: Acids and Bases 3: Organic Compounds: Alkanes and Their Stereochemistry 4: Alkenes: Organic structure and Reactivity 5: Reactions with electrophiles; addition to double bonds 6: Alkynes: An Introduction to Synthesis 7: Nucleophilic substitution of haloalkanes 8: Substitution reactions of alcohols, cyclic ethers 9: Reactions of nucleophiles with aldehydes, ketones, esters, and carboxylic acids 10: Reactions with electrophiles; addition to double bonds 11: Electrophilic substitution of benzene 12: Structure determination: nuclear magnetic resonance and infrared spectroscopies 13: Conjugated compounds, Ultraviolet spectroscopy, Organic materials for photovoltaics 14: Solve problem (Practice training) 15: Final examination
成績評価方法/Evaluation Method	Class Participation 20%, Homework Assignment 20%, Final Written Exam 60%.
教科書および参考書/Textbook and references	
関連URL/URL	
授業時間外学修/Preparation and Review	nothing special
その他/In addition	
更新日付	2022/09/08 09:43

No	書名	著者名	出版社	出版年	ISBN/ISSN	資料種別
1.	『Organic Chemistry』		CENGAGE Learning	2011	0840054440	

1単位の授業科目は、45時間の学修を必要とする内容をもって構成することを標準としています。1単位の修得に必要となる学修時間の目安は、「講義・演習」については15～30時間に授業および授業時間外学修(予習・復習など)30～15時間、「実験、実習及び実技」については30～45時間の授業および授業時間外学修(予習・復習など)15～

0時間です。
One-credit courses require 45 hours of study. In lecture and exercise-based classes, one credit consists of 15-30 hours of class time and 30-15 hours of preparation and review outside od class. In laboratory, practical skill classes, one credit consists of 30-45 hours of class time and 15-0 hours of preparation and review outside of class.