

<<Last Updated:2023/03/03>>

Course Schedule Information

Course Code	271282
Semester	Summer Term
Day and Period	Wed2
Course Name (Japanese)	創薬化学特別講義
Room	Lecture Room B
Course Name	Pharmaceutical Chemistry Special Lecture
Capacity	0
Course Numbering Code	27ADPS7T002,27ADPS6T102
Credits	1.0
Student Year	1,2
Instructor	ARAI Masayoshi,OKUBO Tadayasu,ARISAWA Mitsuhiro,AKAI Shuji,OBICA Satoshi,INOUE Tsuyoshi
Course of Media Class	Not Applicable

※About Course of Media Class

"Course of Media Class" are classes in which more than half of the classes are held in places other than classrooms by making advanced use of various media.

Undergraduate students can include up to 60 credits in media class course as requirements for graduation.

Even if this is not the case, we may hold classes using the media.

Basic Syllabus Information

Other	
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Detailed Syllabus Information

Course Subtitle	Chemistry for Drug Discovery Special Lecture
Language of the Course	English
Type of Class	Lecture Subject
Course Objective	As a pharmaceutical researcher, it aims to acquire the basics and latest knowledge and skills in chemistry area necessary for new drug creation.
Learning Goals	<ul style="list-style-type: none"> • The history and the latest trends of research of natural product drug discovery can be described. • Chemical biology studies can be explained with concrete examples. • The development of novel reactions and techniques available for drug discovery research can be described with concrete examples. • The principle of nucleic acid therapeutics, specific examples and latest trends can be described. • The latest technology and specific examples regarding acquisition of structural information for drug target molecules can be described. • Molecular design and related techniques based on structural information of biomolecules can be described with reference to specific examples.
Requirement / Prerequisite	It is desirable to have knowledge of basic organic chemistry, bioorganic chemistry, analytical chemistry, physicochemistry.
Class Plan	<p>The 1st : Exploring medicinal seeds from natural resources, -History and Frontier- (Prof. Arai)</p> <p>The 2nd : Application of bioactive natural products to chemical biology study. (Prof. Arai)</p> <p>The 3rd : Development of Novel Synthetic Methods Using Continuously Irradiating Microwave and Metal Nano-particle. (Prof. Arisawa)</p>

	<p>The 4th : Collaboration of Enzymes and Metal Catalysts for New Asymmetric Synthesis. (Prof. Akai)</p> <p>The 5th : Principles and Examples of Nucleic Acid Therapeutics. (Prof. Obika)</p> <p>The 6th : Molecular Design Based on the Structural Information of Biomolecules. (Prof. Inoue)</p> <p>The 7th : Structure of Bacteria Fibrous Protein and Photochemistry of Antibody (Prof. Ohkubo)</p>
Independent Study Outside of Class	Students have to read the latest articles related to the topics of each lecture.
Textbooks	Materials will be distributed.
Reference	Nothing special.
Grading Policy	Students will submit the assignments given in each lecture, and these will be evaluated for grading. (100%)
Attendance and Student Conduct Policy*	
Other Remarks	
Special Note	
Office Hour	
Keywords	
Messages to Prospective Students	

Instructor(s)

Instructor Name	Extension
Masayoshi Arai	8215
Mitsuhiro Arisawa	8226
Shuji Akai	8210
Satoshi Obika	8200
Tsuyoshi Inoue	8205
Tadayuki Ohkubo	8220

Cautions for Students