基本情報

時間割コード/Course Code	
開講区分(開講学期) / Semester	Spring and Summer Term
曜日・時間/Day and Period	Wed2
開講科目名/Course Name (Japanese)	身の回りの化学
開講科目名(英) / Course Name	Chemistry and Human Life
教室/Room	#CALC!
定員/Capacity	
ナンバリング/Course Numbering Code	#CALC!
必修·選択/Required/Optional	
授業形態/Type of Class	講義科目
単位数/Credits	2
年次/Student Year	
分野/Field	
担当教員/Instructor	Yasuhiro Kajihara, Yasuhiro Funahashi, Motohiro Nakano
メディア授業科目/Course of Media Class	

詳細情報	
授業サブタイトル/Course Subtitle	General chemistry around us
開講言語/Language of the Course	English
学習方法/Learning Method	聴講・視聴,読解
授業の目的と概要/Course Objective	In order to understand chemistry around us, enzyme, protein, metal and its physical chemistry will be discussed.
履修条件・受講条件/Requirement / Prerequisite	
出欠席及び受講に関するルール/Attendance and	Attendance is required.
Student Conduct Policy	Attendance is required.
教科書・指定教材/Textbooks	Essential doccuments can be downloarded from CLE system.
参考図書・参考教材/Reference	
成績評価に関する補足情報/Additional Information on	After 15-classes, report is required to submit. The detain will be explain in the class.
Grading	Aired 19 diasses, report is required to subtinit. The detain will be explain in the diass.
合理的配慮/Reasonable Accommodation	#REF!
特記事項/Special Note	
オフィスアワー/Office Hour	Please send us e-mail to set up the discussion time.
実務経験のある教員による授業科目/Course	
conducted by instructors with practical experience	

| 分類目標(1) / Learning Goal(1) | Understanding for organic chemistry in our body such as enzymatic reaction, inorganic chemistry such as metal functions and its physical chemistry 学習目標(2) / Learning Goal(2) | 学習目標(3) / Learning Goal(3) | 学習目標(4) / Learning Goal(4) | 学習目標(5) / Learning Goal(5) | Particle | P

	評価方法				
学習目標/Learning Goal	レポート・論文	学習への参加度			
学習目標(1) / Learning Goal(1)	0	0			
学習目標(2) / Learning Goal(2)					
学習目標(3) / Learning Goal(3)					
学習目標(4) / Learning Goal(4)					
学習目標(5) / Learning Goal(5)					
評価割合(%)/Grade Breakdown	70%	30%	%	%	%

授業計画			
回/Time	題目/Title	内容/Content	授業時間外学習/ Independent Study Outside of Class
第1回	Introduction	Introduction	
第2回	Basic organic chemistry in our body	Basic chemistry	
第3回	How to use biological soft wear for the understanding of enzyme.	"Chimera X" will be downloarded into your PC.	Practice chimera X (Molecular modeling software)
第4回	carbohydrate	What is a carbohydrate	Practice chimera X (Molecular modeling software)
第5回	Peptide	What is a peptide	Practice chimera X (Molecular modeling software)
第6回	Protein	What is a protein	Practice chimera X (Molecular modeling software)
第7回	Enzyme-1	What is enzymes	Practice chimera X (Molecular modeling software)
第8回	Enzyme-2	What is enzymes	Practice chimera X (Molecular modeling software)
第9回	Enzyme reaction	Reaction mechanism	Practice chimera X (Molecular modeling software)
第10回	Glycoproteins	Sugar chains link to protein	Practice chimera X (Molecular modeling software)
第11回	Inorganic chemistry-1	Inorganic chemistry in our body 1	Study textbook of inorganic chemistry
第12回	Inorganic chemistry-2	Inorganic chemistry in our body 2	Study textbook of inorganic chemistry
第13回	Physical chemistry-1	Physical chemistryin our body -1	Study textbook of physical chemistry
第14回	Physical chemistry-2	Physical chemistryin our body -2	Study textbook of physical chemistry
第15回	reflection	Discussion	Summarize discussion

授業担当教員						
教員氏名/Instructor Name	ふりがな/Name (hiragana)	所属・職名・講座名/Affiliation, Title, Course	居室/Office	内線/Extension	e-mail/E-mail	
Yasuhiro Kajihara		Department of Chemistry			kajihara@chem.sci.osaka-u.ac.jp	
Yasuhiro Funahashi		Department of Chemistry			funahashi@chem.sci.osaka-u.ac.jp	
Motohiro Nakano		Department of Chemistry			moto@chem.sci.osaka-u.ac.jp	