## Table of Curriculum (For undergraduate students admitted in 2015 or before)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Credit (Homework)	Semester	Remark
	CH211	23.211	Physical Chemistry I	3:0:3(3)	Spring	
•	CH213	23.213	Physical Chemistry II	3:0:3(3)	Fall	
•	CH221	23.221	Organic Chemistry I	3:0:3(3)	Spring	
Mandaton	CH223	23.223	Organic Chemistry II	3:0:3(3)	Fall	
,	CH252	23.252	Chemistry Major Lab I	0:6:2(3)	Fall	
courses	CH263	23.263	Introduction to Analytical Chemistry	3:0:3(3)	Spring	
	CH344	23.344	Inorganic Chemistry I	3:0:3(3)	Spring	
	CH352	23.352	Chemistry Major Lab II	0:6:2(3)	Spring	
•	CH353	23.353	Chemistry Major Lab III	0:6:2(3)	Fall	
CH211   23.211   Physical Chemistry     3:0:3(3)   Spi	Spring					
	CH325	23.325	Bioorganic Chemistry	3:0:3(3)	Spring	
•	CH336	23.336	Physical Organic Chemistry	3:0:3(3)	Fall	
	CH345	23.345	- <u> </u>	3:0:3(3)	Fall	
	CH381	23.381	Biochemistry I	3:0:3(3)	Spring	
	CH382	23.382	Biochemistry II	3:0:3(3)	Fall	
	CH416	23.416	Spectroscopy	3:0:3(3)	Spring or Fall	0
	CH417	23.417	Chemical Reaction Dynamics	3:0:3(3)	"	0
	CH418	23.418	Computational Chemistry	2:3:3(3)	II .	0
	CH419	23.419	Chemistry	3:0:3(3)	"	0
	CH437	23.437	Comprehension of Organic	3:0:3(3)	"	0
,	CH438	23.438	Organic Reactions and Synthesis	3:0:3(3)	"	0
Course	CH439	23.439		3:0:3(3)	11	0
			Spectroscopy	3:0:3(3)	Spring or Fall	0
	CH450	23.450		3:0:3(3)	Spring or Fall	0
	CH451	23.451	Advanced Chemistry Lab.	0:6:2(3)	"	
	CH452	23.452	Introduction to Nanochemistry	3:0:3(3)	"	0
-	CH453	23.453	AI Chemistry	3:0:3(3)	Spring & Fall	0
	CH464	23.464		3:0:3(3)	Fall	0
	CH471	23.471	Introduction to Polymer Chemistry	3:0:3(3)	Spring or Fall	0
	CH484	23.484	Introduction to Chemical Biology	3:0:3(3)	"	0
	CH485	23.485	Special Topics in Modern Chemistry I	3:0:3(3)	11	
	CH490	23.490	Undergraduate Research	0:6:3		
	CH491	23.491	Laboratory Rotation Program	0:3:1	Spring or Fall	
Research	CH492	23.492	Undergraduate Colloquium	1:0:1	Spring	
	CH495	23.495	Individual Study	0:6:1		

<sup>※ ⊚:</sup> Course mutually recognized by undergraduate and graduate programs

 $<sup>\</sup>times$  Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

## Table of Curriculum (For undergraduate students admitted in 2016 or after)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Cred it (Homework)	Semester	Remark
	CH211	23.211	Physical Chemistry I	3:0:3(3)	Spring	
	CH213	23.213	Physical Chemistry II	3:0:3(3)	Fall	
	CH221	23.221	Organic Chemistry I	3:0:3(3)	Spring	
Mandatory	CH223	23.223	Organic Chemistry II	3:0:3(3)	Fall	
major	CH252	23.252	Chemistry Major Lab I	0:6:2(3)	Fall	
courses	CH263	23.263	Introduction to Analytical Chemistry	3:0:3(3)	Spring	
	CH344	23.344	Inorganic Chemistry I	3:0:3(3)	Spring	
	CH352	23.352	Chemistry Major Lab II	0:6:2(3)	Spring	
	CH353	23.353	Chemistry Major Lab III	0:6:2(3)	Fall	
	CH315	23.315	Physical Chemistry III	3:0:3(3)	Spring	
	CH325	23.325	Bioorganic Chemistry	3:0:3(3)	Spring	
	CH336	23.336	Physical Organic Chemistry	3:0:3(3)	Fall	
	CH382	23.382	Biochemistry II	3:0:3(3)	Fall	
	CH416	23.416	Introduction to Molecular Spectroscopy	3:0:3(3)	Spring or Fall	0
	CH417	23.417	Chemical Reaction Dynamics	3:0:3(3)	ıı .	0
	CH418	23.418	Computational Chemistry	2:3:3(3)	II .	0
	CH419	23.419	Introduction to Solid-State Chemistry	3:0:3(3)	ıı	0
	CH437	23.437	Structure Determination and Comprehension of Organic Molecules	3:0:3(3)	11	0
Elective	CH438	23.438	Organic Reactions and Synthesis	3:0:3(3)	"	0
m a j o r course	CH439	23.439	Introduction to Organometallic Chemistry	3:0:3(3)	п	0
	CH444	23.444	Inorganic Reactions and Spectroscopy	3:0:3(3)	п	0
	CH450	23.450	Chemical Writing and presentation	3:0:3(3)	"	0
	CH451	23.451	Advanced Chemistry Lab.	0:6:2(3)	"	
	CH452	23.452	Introduction to Nanochemistry	3:0:3(3)	"	0
	CH453	23.453	Al Chemistry	3:0:3(3)	"	0
	CH464	23.464	Electroanalytical Chemistry	3:0:3(3)	"	0
	CH471	23.471	Introduction to Polymer Chemistry	3:0:3(3)	"	0
	CH484	23.484	Introduction to Chemical Biology	3:0:3(3)	"	0
	CH485	23.485	Special Topics in Modern Chemistry I	3:0:3(3)	"	
Adva-	CH345	23.345	Inorganic Chemistry II	3:0:3(3)	Fall	
nced major	CH381	23.381	Biochemistry I	3:0:3(3)	Spring	
	CH490	23.490	Undergraduate Research	0:6:3	. 3	
	CH491	23.491	Laboratory Rotation Program	0:3:1	Spring or Fall	
Research	CH492	23.492	Undergraduate Colloquium	1:0:1	Spring	
	CH495	23.495	Individual Study	0:6:1		

<sup>※ ⊚:</sup> Course mutually recognized by undergraduate and graduate programs

<sup>\*</sup> Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

## Table of Curriculum (Graduate Program)

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Cred it (Homework)	Semester	Remark
	CH502	23.502	Quantum Chemistry I	3:0:3(3)	Spring or Fall	0
	CH503	23.503	Statistical Thermodynamics I	3:0:3(3)	"	0
	CH504	23.504	Advanced Physical Chemistry	3:0:3(3)	"	
	CH521	23.521	Advanced Organic Chemistry	3:0:3(3)	II .	
	CH522	23.522	Organic Synthesis I	3:0:3(3)	п	©
	CH523	23.523	Organic Synthesis II	3:0:3(3)	п	
	CH524	23.524	Contemporary Organic Chemistry	3:0:3(3)	"	0
	CH541	23.541	Advanced Inorganic Chemistry	3:0:3(3)	"	0
	CH542	23.542	Organometallic Chemistry	3:0:3(3)	"	0
	CH571	23.571	Structural chemistry of soft matter	3:0:3(3)	п	0
	CH581	23.581	Advanced Biochemistry	3:0:3(3)	II .	
	CH582	23.582	Protein Chemistry	3:0;3(3)	II .	0
	CH604	23.604	Quantum Chemistry II	3:0:3(3)	II .	
	CH605	23.605	Statistical Thermodynamics II	3:0:3(3)	"	
	СН606	23.606	Chemical Reaction Dynamics	3:0:3(3)	"	
	CH607	23.607	Surface Chemistry	3:0:3(3)	"	
	CH609	23.609	Electrochemistry 3:0:3(3) "		"	
	CH610	23.610	Structural Biochemistry	3:0:3(3)	"	
	CH626	23.626	Natural Products	3:0:3(3)	"	
Elective	CH627	23.627	Heterocyclic Chemistry	3:0:3(3)	"	
	CH628	23.628	Organometallic Reactions	3:0:3(3)	"	
	CH632	23.632	Stereochemistry of Organic Chemistry	3:0:3(3)	"	
	CH644	23.644	Bioinorganic Chemistry	3:0:3(3)	"	
	CH645	23.645	Catalysis Chemistry	3:0:3(3)	"	
	CH646	23.646	Materials Chemistry	3:0:3(3)	"	
	CH661	23.661	Electrocatalysis	3:0:3(3)	II	
	CH671	23.671	Chemistry of Organic High Polymers	3:0:3(3)	II .	
	CH672	23.672	Specialty Polymer Chemistry	3:0:3(3)	"	
	CH673	23.673	Polymer Physical Chemistry	3:0:3(3)	"	
	CH674	23.674	Organic Electronic Materials	3:0:3(3)	"	
	CH675	23.675	Introduction to Lithography	3:0:3(3)	"	
	CH683	23.683	Cell Biochemistry	3:0:3(3)	"	
	CH711	23.711	Special Topics in Physical Chemistry I	3:0:3(3)	"	
	CH712	23.712	Special Topics in Physical Chemistry II	3:0:3(3)	"	
	CH713	23.713	Special Topics in Physical Chemistry III	3:0:3(3)	"	
	CH733	23.733	Special Topics in Organic Chemistry I	3:0:3(3)	"	
	CH734	23.734	Special Topics in Organic Chemistry II	3:0:3(3)	"	
	CH735	23.735	Special Topics in Organic Chemistry III	3:0:3(3)	II .	
	CH746	23.746	Special Topics in Inorganic Chemistry I	3:0:3(3)	"	

Course Type	Course Code	Course NO.	Course Title	Lecture:Lab.:Cred it (Homework)	Semester	Remark
	CH747	23.747	Special Topics in Inorganic Chemistry II	3:0:3(3)	II .	
	CH773	23.773	Special Topics in Polymer Chemistry I	3:0:3(3)	"	
	CH774	23.774	Special Topics in Polymer Chemistry II	3:0:3(3)	"	
	CH782	23.782	Special Topics in Biochemistry I	3:0:3(3)	II	
	CH783	23.783	Special Topics in Biochemistry II	3:0:3(3)	"	
	CH881	23.881	Advanced Special Topic in Chemistry I	1:0:1(0)	Summer	
	CH882	23.882	Advanced Special Topic in Chemistry II	2:0:2(0)	Summer	
	CH960	23.960	Thesis / Dissertation Research (Master)			
	CH966	23.966	Seminar (Master)	1:0:1		
Research	CH980	23.980	Thesis / Dissertation Research (Doctoral)			
	CH986	23.986	Seminar (Doctoral)	1:0:1		
	CH990	23.990	Chemistry Education Training	0:3:1		

 $<sup>\</sup>mathbb{X}$   $\odot$ : Course mutually recognized by undergraduate and graduate programs

<sup>\*</sup> Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

## Substitute Course List

Substitute courses in the department								
Category -	Cours	es Currently offered	Courses not currently offered					
	Course No.	Course Title	Course No.	Course Title	Remark			
Under- graduate	CH344	Inorganic Chemistry I	CH241	Inorganic Chemistry I	Change in Course Code			
Under- graduate	CH345	Inorganic Chemistry II	CH242	Inorganic Chemistry II	Change in Course Code			
Under- graduate	CH444	Inorganic Reactions and Spectroscopy	CH444	Inorganic Materials Chemistry	Change in Course Title			
Under- graduate	CH263	Introduction to Analytical Chemistry	CH361	Introduction to Analytical Chemistry	Change in Course Code			
Under- graduate	CH263	Introduction to Analytical Chemistry	CH261	Analytical Chemistry	Course Closed			
Under- graduate	CH263	Introduction to Analytical Chemistry	CH463	Instrumental Analysis	Course Closed			
Under- graduate	CH252	Chemistry Major Lab I	CH252	Chemistry Lab I	Change in Course Title			
Under- graduate	CH252	Chemistry Major Lab I	CH351	Chemistry Lab II	Course Closed			
Under- graduate	CH352	Chemistry Major Lab II	CH251	Chemistry Lab I	Course Closed			
Under- graduate	CH352	Chemistry Major Lab II	CH352	Chemistry Lab II	Change in Course Title			
Under- graduate	CH361	Introduction to Analytical Chemistry	CH463	Instrumental Analysis	Course Closed			
Under- graduate	CH382	Biochemistry II	CH482	Biochemistry II	Change in Course Code			
Under- graduate	CH241	Inorganic Chemistry I	CH342	Inorganic Chemistry II	Change in Course Code			
Under- graduate	CH242	Inorganic Chemistry II	CH342	Inorganic Chemistry II	Change in Course Code			
Under- graduate	CH416	Introduction to Molecular Spectroscopy	CH316	Molecular Spectroscopy	Course Closed			

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