

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 |
|-------------------------|-------------|--------------------------------------|--|--------------------------------|----------------|--------|
| Mandatory major courses | 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 | |
| | CH223 | 23.223 | Organic Chemistry II | 3:0:3(3) | Fall | |
| | CH252 | 23.252 | Chemistry Major Lab I | 0:6:2(3) | Fall | |
| | 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 | |
| Elective major course | 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 | |
| | CH345 | 23.345 | Inorganic Chemistry II | 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 | Introduction to Molecular Spectroscopy | 3:0:3(3) | Spring or Fall | ◎ |
| | CH417 | 23.417 | Chemical Reaction Dynamics | 3:0:3(3) | " | ◎ |
| | CH418 | 23.418 | Computational Chemistry | 2:3:3(3) | " | ◎ |
| | CH419 | 23.419 | Introduction to Solid-State Chemistry | 3:0:3(3) | " | ◎ |
| | CH437 | 23.437 | Organic Structure Analysis | 3:0:3(3) | " | ◎ |
| | CH438 | 23.438 | Organic Reactions and Synthesis | 3:0:3(3) | " | ◎ |
| | CH439 | 23.439 | Introduction to Organometallic Chemistry | 3:0:3(3) | " | ◎ |
| | CH444 | 23.444 | Inorganic Materials Chemistry | 3:0:3(3) | Fall | |
| | CH450 | 23.450 | Chemical Writing and presentation | 3:0:3(3) | Spring or Fall | ◎ |
| | CH451 | 23.451 | Advanced Chemistry Lab. | 0:6:2(3) | " | |
| | CH452 | 23.452 | Introduction to Nanochemistry | 3:0:3(3) | " | ◎ |
| CH471 | 23.471 | Introduction to Polymer Chemistry | 3:0:3(3) | " | ◎ | |
| CH484 | 23.484 | Introduction to Chemical Biology | 3:0:3(3) | " | ◎ | |
| CH485 | 23.485 | Special Topics in Modern Chemistry I | 3:0:3(3) | " | | |
| Research | CH490 | 23.490 | Graduation Research | 0:6:3 | | |
| | CH491 | 23.491 | Laboratory Rotation Program | 0:3:1 | Spring or Fall | |
| | CH492 | 23.492 | Undergraduate Colloquium | 1:0:1 | Spring | |
| | CH495 | 23.495 | Individual Study | 0:6:1 | | |

※ ◎: Course mutually recognized by undergraduate and graduate programs

※ 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.:Credit (Homework) | Semester | Remark |
|-------------------------|-------------|--------------------------------------|--|--------------------------------|----------------|--------|
| Mandatory major courses | 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 | |
| | CH223 | 23.223 | Organic Chemistry II | 3:0:3(3) | Fall | |
| | CH252 | 23.252 | Chemistry Major Lab I | 0:6:2(3) | Fall | |
| | 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 | |
| Elective major course | 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 | ◎ |
| | CH417 | 23.417 | Chemical Reaction Dynamics | 3:0:3(3) | " | ◎ |
| | CH418 | 23.418 | Computational Chemistry | 2:3:3(3) | " | ◎ |
| | CH419 | 23.419 | Introduction to Solid-State Chemistry | 3:0:3(3) | " | ◎ |
| | CH437 | 23.437 | Organic Structure Analysis | 3:0:3(3) | " | ◎ |
| | CH438 | 23.438 | Organic Reactions and Synthesis | 3:0:3(3) | " | ◎ |
| | CH439 | 23.439 | Introduction to Organometallic Chemistry | 3:0:3(3) | " | ◎ |
| | CH444 | 23.444 | Inorganic Materials Chemistry | 3:0:3(3) | Fall | |
| | CH450 | 23.450 | Chemical Writing and presentation | 3:0:3(3) | Spring or Fall | ◎ |
| | CH451 | 23.451 | Advanced Chemistry Lab. | 0:6:2(3) | " | |
| | CH452 | 23.452 | Introduction to Nanochemistry | 3:0:3(3) | " | ◎ |
| | CH471 | 23.471 | Introduction to Polymer Chemistry | 3:0:3(3) | " | ◎ |
| | CH484 | 23.484 | Introduction to Chemical Biology | 3:0:3(3) | " | ◎ |
| CH485 | 23.485 | Special Topics in Modern Chemistry I | 3:0:3(3) | " | | |
| Advanced major | CH345 | 23.345 | Inorganic Chemistry II | 3:0:3(3) | Fall | |
| | CH381 | 23.381 | Biochemistry I | 3:0:3(3) | Spring | |
| Research | CH490 | 23.490 | Graduation Research | 0:6:3 | | |
| | CH491 | 23.491 | Laboratory Rotation Program | 0:3:1 | Spring or Fall | |
| | CH492 | 23.492 | Undergraduate Colloquium | 1:0:1 | Spring | |
| | CH495 | 23.495 | Individual Study | 0:6:1 | | |

※ ◎: Course mutually recognized by undergraduate and graduate programs

※ 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.:Credit (Homework) | Semester | Remark |
|-------------|-------------|-------------------------------------|--|--------------------------------|----------------|--------|
| 선택 | CH502 | 23.502 | Quantum Chemistry I | 3:0:3(3) | Spring | ◎ |
| | CH503 | 23.503 | Statistical Thermodynamics I | 3:0:3(3) | Fall | ◎ |
| | CH504 | 23.504 | Advanced Physical Chemistry | 3:0:3(3) | Fall | |
| | CH521 | 23.521 | Advanced Organic Chemistry | 3:0:3(3) | Spring | |
| | CH522 | 23.522 | Organic Synthesis I | 3:0:3(3) | Spring | ◎ |
| | CH523 | 23.523 | Organic Synthesis II | 3:0:3(3) | Fall | |
| | CH541 | 23.541 | Advanced Inorganic Chemistry | 3:0:3(3) | Spring | ◎ |
| | CH542 | 23.542 | Organometallic Chemistry | 3:0:3(3) | Fall | ◎ |
| | CH581 | 23.581 | Advanced Biochemistry | 3:0:3(3) | Spring | |
| | CH582 | 23.582 | Protein Chemistry | 3:0:3(3) | Fall | ◎ |
| | CH604 | 23.604 | Quantum Chemistry II | 3:0:3(3) | Spring or Fall | |
| | CH605 | 23.605 | Statistical Thermodynamics II | 3:0:3(3) | " | |
| | CH606 | 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) | " | |
| | 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) | " | |
| | CH671 | 23.671 | Organic Chemistry of High Polymers | 3:0:3(3) | " | |
| | 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 | 3:0:3(3) | " | | |

| Course Type | Course Code | Course NO. | Course Title | Lecture:Lab.:Credit (Homework) | Semester | Remark |
|-------------|-------------|------------|---|--------------------------------|----------|--------|
| | | | III | | | |
| | CH746 | 23.746 | Special Topics in Inorganic Chemistry I | 3:0:3(3) | " | |
| | CH747 | 23.747 | Special Topics in Inorganic Chemistry II | 3:0:3(3) | " | |
| | 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) | " | |
| | 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 | |
| 연구 | CH960 | 23.960 | Thesis / Dissertation Research (Master) | | | |
| | CH966 | 23.966 | Seminar (Master) | 1:0:1 | | |
| | CH980 | 23.980 | Thesis / Dissertation Research (Doctoral) | | | |
| | CH986 | 23.986 | Seminar (Doctoral) | 1:0:1 | | |
| | CH990 | 23.990 | Chemistry Education Training | 0:3:1 | | |

※ ◎: Course mutually recognized by undergraduate and graduate programs

※ 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 | Courses 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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