

CHEMISTRY: Bachelor of Science

(124 cr)

Keene State College

2007-2008 Catalog

INTEGRATIVE STUDIES PROGRAM REQUIREMENTS (44 cr)

Note: Students must complete the **Thinking & Writing** requirement within their first two semesters and the **Quantitative Literacy** requirement within their first three semesters.

Foundations

ITW: Thinking & Writing _____

IQL: Quantitative Literacy _____

Perspectives

NOTE: Students may take only **one** course in any specific discipline within the *PERSPECTIVES* area. Disciplines are shown in **BOLD**, such as IAART.

IA: Arts – IAART, IAMU, IATAD

1 course: _____

IH: Humanities - IHCOMM, IHENG, IHFILM, IHFR, IHGER, IHHIST, IHJRN, IHML, IHPHIL, IHSP

2 courses: _____ _____

IA/IH: 1 additional course in either IA or IH

1 course: _____

IN: Natural Sciences – INASTR, INBIO, INCHEM, INGEOL, INMET, INPHYS

2 courses: _____ _____

IS: Social Sciences – ISANTH, ISCJS, ISECON, ISGEOG, ISPOSC, ISPSYC, ISSOC, ISSOSC

2 courses: _____ _____

Interdisciplinary

II: Any course beginning with II

1 course: _____

NOTE: Courses fulfilling *PERSPECTIVES* and *INTERDISCIPLINARY* requirements may be at the 100-400 level. All students must complete a minimum of 24 credits at the 100-200 level and a minimum of 8 credits at the 300-400 level to complete the *Integrative Studies Program (ISP)*.

MAJOR REQUIREMENTS (72 cr)

Core (48 cr):

- | | |
|---|--|
| <input type="checkbox"/> INCHEM 111 General Chemistry I** | <input type="checkbox"/> CHEM 341 Physical Chemistry I |
| <input type="checkbox"/> CHEM 112 General Chemistry II | <input type="checkbox"/> CHEM 342 Physical Chemistry II |
| <input type="checkbox"/> CHEM 221 Organic Chemistry I | <input type="checkbox"/> CHEM 363 Inorganic Chemistry |
| <input type="checkbox"/> CHEM 222 Organic Chemistry II | <input type="checkbox"/> CHEM 375 Biochemistry |
| <input type="checkbox"/> CHEM 251 Quantitative Analysis | <input type="checkbox"/> CHEM 421 Adv. Synthetic Chemistry |
| <input type="checkbox"/> CHEM 321 Organic Chem. III ~or~ <input type="checkbox"/> CHEM 333 Medicinal Chem. ~or~ <input type="checkbox"/> CHEM 373 Polymer Chem. | <input type="checkbox"/> CHEM 454 Instrumental Methods |

Allied Discipline Requirements (24 cr):

- | | |
|--|---|
| <input type="checkbox"/> BIO 110 Molecules & Cells | <input type="checkbox"/> INPHYS 141 College Physics I** |
| <input type="checkbox"/> MATH 141 Introductory Statistics* | ~&~ <input type="checkbox"/> PHYS 142 College Physics II |
| <input type="checkbox"/> MATH 151 Calculus I | ~or~ |
| <input type="checkbox"/> MATH 152 Calculus II | <input type="checkbox"/> INPHYS 241 University Physics I** |
| | ~&~ <input type="checkbox"/> PHYS 242 University Physics II |

*NOTE: MATH 141 will fulfill the IQL requirement.

**NOTE: Courses may be used to satisfy an Integrative Studies requirements; credits only count once.

CHEMISTRY: FOUR-YEAR ADVISING PLAN

FIRST YEAR – FALL SEMESTER
<ul style="list-style-type: none">• INCHEM 111• MATH 141*• INPHYS 141• Integrative Studies course
16 credits

FIRST-YEAR – SPRING SEMESTER
<ul style="list-style-type: none">• CHEM 112• MATH 151• PHYS 142• ITW 101
16 credits

SECOND YEAR – FALL SEMESTER
<ul style="list-style-type: none">• CHEM 221• CHEM 251• MATH 152• Integrative Studies
16 credits

SECOND YEAR – SPRING SEMESTER
<ul style="list-style-type: none">• CHEM 222• BIO 110• Integrative Studies• Integrative Studies
16 credits

THIRD YEAR – FALL SEMESTER
<ul style="list-style-type: none">• CHEM 341• CHEM 375• Integrative Studies• Integrative Studies
16 credits

THIRD YEAR – SPRING SEMESTER
<ul style="list-style-type: none">• CHEM 342• CHEM 363• Integrative Studies• Integrative Studies
16 credits

FOURTH YEAR – FALL SEMESTER
<ul style="list-style-type: none">• Integrative Studies• Integrative Studies• Elective• Elective
16 credits

FOURTH YEAR – SPRING SEMESTER
<ul style="list-style-type: none">• CHEM 321 -or- 333 -or- 373• CHEM 421• CHEM 454
12 credits

*Fulfills IQL: Quantitative Literacy requirement in Integrative Studies (credits count once).

**Fulfills a Perspectives/Natural Sciences requirement in Integrative Studies (credits count once).

NOTE: Transfer students and students interested in Chemistry internships or International/National Exchange should meet with their Chemistry faculty advisor as early as possible to plan their program.