### MAJOR REQUIREMENTS

**Required Semester Hours:**
- **B.A.:** 34 semester hours + 8 prerequisite semester hours
- **B.S.:** 46 semester hours + 20 prerequisite semester hours

#### Prerequisites and Supporting Courses:

**B.A.: 8 semester hours**
- MATH 1150: Pre-Calculus Mathematics (4) - meets Analytical & Quantitative Reasoning Requirement
- BIOL 1260: Introduction to Cell Biology (4) - meets Writing Intensive Requirement

**B.S.: 20 semester hours**
- MATH 1510: Calculus I (4) - meets Analytical & Quantitative Reasoning Requirement
- MATH 1520: Calculus II (4)
- BIOL 1260: Introduction to Cell Biology (4) - meets Writing Intensive Course Requirement

Select one of the following Physics track options:

**Option 1:**
- PHEN 1110: College Physics I (4) (offered only during the summer term)
- PHEN 1120: College Physics II (4) (offered only during the summer term)

**Option 2:**
- PHEN 1210: Introductory Physics I (4) (offered only during the academic year)
- PHEN 1220: Introductory Physics II (4) (offered only during the academic year)

#### Required Core Courses: B.A. 30 semester hours, B.S. 38 semester hours

**Both B.A. & B.S. Degrees**
- CHEM 1150: General Chemistry I (4) - meets Physical Science Requirement
- CHEM 1160: General Chemistry II (4)
- CHEM 2310: Organic Chemistry I (4)
- CHEM 2320: Organic Chemistry II (4)
- CHEM 2410: Analytical Chemistry (4)
- CHEM 3010: Chemistry Ethics, Skill, and Professional Practices (2) - meets Ethical Reasoning Requirement
- CHEM 3330: Biochemistry (4) - meets Research Writing Course Requirement
- CHEM 3340: Advanced Biochemistry (4)
- CHEM 4020: Chemistry Seminar Series (must be taken three times pass/fail, 0 semester hours)

**B.S. Degree Additional Courses Required:**
- CHEM 2160: Inorganic Chemistry (4)

One of the following
- CHEM 3250: Physical Chemistry - Thermodynamics and Kinetics (4)
- CHEM 3260: Physical Chemistry - Quantum Chemistry and Spectroscopy (4)

#### Electives:

**B.A.: 4 semester hours - one of the following courses**
- Chemistry courses numbered 2000 and above (4)
- BIOL 3210: Genetics (4)
- BIOL 3230: Molecular Biology (4)
# Academic Planning Guide - Biochemistry

Effective with 2018-2019 Catalog

## Core Curriculum

Starting with the framework of North Park’s identity as a Christian, liberal arts institution, our Core Curriculum is intentionally multi-disciplinary and multi-year. It is set up as a progress through three areas: Foundation Courses, Explorations Courses, and Capstone Courses.

http://www.northpark.edu/Academics/Undergraduate-Studies/Core-Curriculum

### Foundations

Preparation for more in-depth work in both the Core Curriculum and your major

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Cornerstone Seminar (4sh)</td>
<td></td>
</tr>
<tr>
<td>Biblical Studies (4sh)</td>
<td></td>
</tr>
<tr>
<td>Health and Well-Being (2sh)</td>
<td></td>
</tr>
<tr>
<td>Analytical &amp; Quantitative Reasoning (4sh)</td>
<td></td>
</tr>
<tr>
<td>Global Histories (4sh)</td>
<td></td>
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<tr>
<td>Modern Languages (8sh)</td>
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### Explorations

Knowledge in specific disciplines, with strong emphasis on how you can use them in the context of your own life

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Art and Aesthetics (2sh)</td>
<td></td>
</tr>
<tr>
<td>Christian Life &amp; Thought (4sh)</td>
<td></td>
</tr>
<tr>
<td>Life Science (2sh/lab)</td>
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<tr>
<td>Physical Science (2sh/lab)</td>
<td></td>
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<tr>
<td>Culture and Society (4sh)</td>
<td></td>
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<tr>
<td>Ethical Reasoning (2sh)</td>
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</table>

### Intermediate Level Writing

Two courses in the context of your major that specifically address writing clearly and doing effective research

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Writing Intensive Course (4sh)</td>
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<tr>
<td>Research Writing Course (4sh)</td>
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</table>

### Keystone

Interdisciplinary integration of skills and knowledge applied to contemporary social issues

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Keystone Seminar (4sh)</td>
<td></td>
</tr>
</tbody>
</table>

The Academic Planning Guide is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of a faculty advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered the institution.