

# ACADEMIC PLANNING GUIDE - BIOCHEMISTRY

effective with 2017-2018 Catalog

## MAJOR REQUIREMENTS

**Required Semester Hours : BA: 42 semester hours  
BS: 66 semester hours**

### Prerequisites and Supporting Courses :

**BA: 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

**BS: 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 Requirement

Select one of the following Physics track options:

*option 1:*

- PHYS 1110: College Physics I (4) (offered only during the summer term)
- PHYS 1120: College Physics II (4) (offered only during the summer term)

*option 2:*

- PHYS 1210: Introductory Physics I (4) (offered only during the academic year)
- PHYS 1220: Introductory Physics II (4) (offered only during the academic year)

### Required Core Courses :

**BA: 30 semester hours**

**BS: 38 semester hours**

- 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)
  - CHEM 3340: Advanced Biochemistry (4)
  - CHEM 4020: Chemistry Seminar Series (0), must be taken 3 times pass/fail
- BS Only:**
- CHEM 2160: Inorganic Chemistry (4)
  - CHEM 3250: Physical Chemistry - Thermodynamics and Kinetics
  - or
  - CHEM 3260: Physical Chemistry - Quantum Chemistry and Spectroscopy

### Electives:

**BA: 4 semester hours - one of the following**

**BS: 8 semester hours - two of the following (one CHEM, one BIOL)**

- Chemistry courses numbered 2000 and above (4)
- BIOL 3210: Genetics (4)
- BIOL 3230: Molecular Biology (4)

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## 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

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

Cornerstone Seminar (4sh)

Biblical Studies (4sh)

Health and Well-Being (2sh)

Analytical & Quantitative Reasoning (4sh)
<i>met by MATH 1150 (BA only) or MATH 1510 (BS only)</i>

Global Histories (4sh)

Modern Languages (8sh)

### Explorations

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

Art and Aesthetics (2sh)

Christian Life & Thought (4sh)

Life Science (2sh/lab)

Physical Science (2sh/lab)
<i>met by CHEM 1150</i>

Culture and Society (4sh)

Ethical Reasoning (2sh)
<i>met by CHEM 3010</i>

### Intermediate Level Writing

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

Writing Intensive Course (4sh)
<i>met by BIOL 1260</i>

Research Writing Course (4sh)
<i>met by CHEM 3330</i>

### Keystone

Interdisciplinary integration of skills and knowledge applied to contemporary social issues

Keystone Seminar (4sh)

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.

