

- Minimum 30 of the last 60 credits earned at PennWest.
- Minimum of 26 major credits must be completed at PennWest or a State System (PASSHE) university.
- Minimum Total of 42 Credits in Advanced Coursework.

General Education

Foundations: (13 Credits)

Oral Communication (3 Credits)

☐ _____

Quantitative Reasoning (4 Credits)

☐ MATH 2410 Calculus I

Technological Literacy (3 Credits)

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Written Communication (3 Credits)

☐ ENGL 1200 College Composition

Discoveries: (Credits 29)

At least two (2) disciplines must be represented within each of the three (3) categories.

Art/Humanities (9 Credits)

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Natural Sciences & Technology (11 Credits)

☐ CHEM 1108 General Chemistry I

☐ MATH 2420 Calculus II

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Social Sciences (9 Credits)

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Elective/Wellness & Personal Health: (4 Credits)

☐ CHEM 1128 General Chemistry II

Competencies:

Applied Methodologies

☐ CHEM 1128 General Chemistry II

Ethical Reasoning

☐ _____

Information Literacy

☐ CHEM 3010 Chemistry Career & Professional Development II

Intercultural Fluency

☐ _____

Keystone Experience

☐ CHEM 4900 Chemistry Capstone

Quantitative Applications

☐ CHEM 1108 General Chemistry I

Writing Intensive - Two (2) courses are required

☐ CHEM 2205 Organic Chemistry I Laboratory

☐ CHEM 4605 Biochemistry I Laboratory

Program Requirements

Required Major Courses: (46-48 Credits)

- ☐ PHYS 1500/10 General Physics I Lecture
 - ☐ ~Or~ PHYS 2500/10 University Physics I Lab
- ☐ PHYS 1600/10 General Physics II Lecture
 - ☐ ~Or~ PHYS 2600/10 University Physics II
- ☐ CHEM 2010 Chemistry Career and Professional Development I
- ☐ CHEM 2200 Organic Chemistry I Lecture
 - ☐ ~And~ CHEM 2205 Organic Chemistry I Lab
- ☐ CHEM 2250 Organic Chemistry II Lecture
 - ☐ ~And~ CHEM 2255 Organic Chem II Lab
 - ☐ ~Or~ CHEM 4115 Advanced Chemistry Lab
- ☐ CHEM 3010 Chemistry Career and Professional Development II
- ☐ CHEM 3300 Inorganic Chemistry I Lecture
 - ☐ ~And~ CHEM 3305 Inorganic Chemistry I Lab
 - ☐ ~Or~ CHEM 3315 Intermediate Chemistry I Lab
- ☐ CHEM 3350 Inorganic Chemistry II Lecture
- ☐ CHEM 3400 Quantitative Chemical Analysis Lecture
 - ☐ ~And~ CHEM 3405 Quantitative Chemical Analysis Lab
 - ☐ ~Or~ CHEM 3415 Intermediate Chemistry II Lab
- ☐ CHEM 3450 Instrumental Analysis
- ☐ CHEM 4500 Physical Chemistry I Lecture
 - ☐ ~And~ CHEM 4505 Physical Chemistry I Lab
 - ☐ ~Or~ CHEM 4515 Intermediate Chemistry III Lab
- ☐ CHEM 4550 Physical Chemistry II
- ☐ CHEM 4600 Biochemistry I Lecture
 - ☐ ~And~ CHEM 4605 Biochemistry I Laboratory
- ☐ CHEM 4900 Chemistry Capstone

Major Electives: (6-7 Credits)

Choose 4 or More Credits from: CHEM 2255, CHEM 3355, CHEM 3455, CHEM 4115, CHEM 4555, CHEM 4905, CHEM 4915

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Choose at least one course from: CHEM 2800, CHEM 3250, CHEM 3270, CHEM 3290, CHEM 3370, CHEM 3650, CHEM 3670, CHEM 3900, CHEM 4200, CHEM 4250, CHEM 4650, CHEM 4670, CHEM 4700, CHEM 4750, CHEM 4800, CHEM 4950

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Free Electives: (22 Credits)

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Suggested Four Year Course Sequence

Year 1

Fall Semester

CHEM 1108 General Chemistry I
ENGL 1200 College Composition
MATH 2410 Calculus I
General Elective/Minor Course

Spring Semester

CHEM 1128 General Chemistry II
MATH 2420 Calculus II
Foundations- Oral Communications
Foundations- Tech Literacy

Year 3

Fall Semester

CHEM 4500 Physical Chemistry I Lec
~And~ CHEM 4505 Physical Chemistry I Lab
~Or~ CHEM 4515 Intermediate Lab
CHEM 4600 Biochemistry I Lec
~And~ CHEM 4605 Biochemistry I Lab
Discoveries - Social Science Course
Discoveries - Natural Sci & Tech Course

Spring Semester

CHEM 3010 Chemistry Career & Prof Dev II
CHEM 3450 Instrumental Methods Lec
~And~ CHEM 3455 Instructional Methods Lab
CHEM 4550 Physical Chemistry II Lec
~And~ CHEM 4555 Physical Chemistry II Lab
~Or~ CHEM 4515 Intermediate Lab
Discoveries - Arts & Humanities Course

* Strongly advise PHYS 2500/2510 and PHYS 2600/2610 series.

Year 2

Fall Semester

CHEM 2200 Organic Chemistry I Lec
~And~ CHEM 2205 Organic Chemistry I Lab
CHEM 3400 Quantitative Chemical Analysis Lec
~And~ CHEM 4505 Physical Chemistry I Lab
~Or~ CHEM 3415 Intermediate Chemistry II Lab
PHYS 1500/10 General Physics I Lec
~Or~ PHYS 2500/10 University Physics I Lab
Discoveries-Arts & Humanities Course

Spring Semester

CHEM 2010 Chemistry Career and Professional Development I
CHEM 2250 Organic Chemistry II Lec
~And~ CHEM 2255 Organic Chemistry II Lab
~Or~ CHEM 4115 Advanced Chemistry Lab
CHEM 3300 Inorganic Chemistry I Lec
~And~ CHEM 3305 Inorganic Chemistry I Lab
~Or~ CHEM 3315 Intermediate Lab
PHYS 1600/2600 Physics II Lec *
~And~ PHYS 1610/2610 Physics II Lab *

Year 4

Fall Semester

CHEM 3350 Inorganic Chemistry II Lec
~And~ Inorganic Chemistry II Lab
Advanced Chemistry Elective
Advanced Chemistry Lab/Research
Discoveries - Social Science Course
Elective Course/Minor

Spring Semester

CHEM 4900 Chemistry Capstone
Advanced Chemistry Elective
Discoveries - Art & Humanities Course
Discoveries - Social Science Course
Elective Course/Minor

^Select General Education courses through faculty advisement.

