

- Minimum 30 of the last 60 credits earned at PennWest.
- Minimum of 31 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 College Composition

Technological Literacy (3 Credits)

☐ _____

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)

☐ _____
☐ _____
☐ _____

Natural Sciences & Technology 11 Credits)

- ☐
- CHEM 1108 General Chemistry I
-
- ☐
- MATH 2420 Analytical Geometry & Calculus II
-
- ☐
- _____

Social Sciences (9 Credits)

- ☐
- ANTH 1000 Introduction to Anthropology
-
- ☐
- _____
-
- ☐
- _____

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 & Prof 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
☐ ~Or~ PHYS 2500/10 University Physics I
- ☐ PHYS 1600/10 General Physics II
☐ ~Or~ PHYS 2600/10 University Physics II
- ☐ CHEM 2010 Chemistry Career and Professional Development I
- ☐ CHEM 2200 Organic Chemistry I
☐ ~And~ CHEM 2205 Organic Chemistry I Laboratory
- ☐ CHEM 2250 Organic Chemistry II
☐ ~And~ CHEM 2255 Organic Chemistry II Laboratory
☐ ~Or~ CHEM 4115 Advanced Chemistry Laboratory
- ☐ CHEM 3010 Chemistry Career and Professional Development II
- ☐ CHEM 3300 Inorganic Chemistry I
☐ ~And~ CHEM 3305 Inorganic Chemistry I Laboratory
☐ ~Or~ CHEM 3315 Intermediate Chemistry I Laboratory
- ☐ CHEM 3400 Quantitative Chemical Analysis
☐ ~And~ CHEM 3405 Quantitative Chemical Analysis Laboratory
☐ ~Or~ CHEM 3415 Intermediate Chemistry II Laboratory
- ☐ CHEM 3450 Instrumental Analysis
- ☐ CHEM 3455 Instrumental Methods Laboratory
- ☐ CHEM 4500 Physical Chemistry I
☐ ~And~ CHEM 4505 Physical Chemistry I Laboratory
☐ ~Or~ CHEM 4515 Intermediate Chemistry III Laboratory
- ☐ CHEM 4600 Biochemistry I
☐ ~And~ CHEM 4605 Biochemistry I Laboratory
- ☐ CHEM 4700 Forensic Analysis
- ☐ CHEM 4900 Chemistry Capstone

Required Concentration Courses: (25 Credits)

- ☐ BIOL 1900 Intro to Cell and Molecular Biology
- ☐ BIOL 2202 Genetics
- ☐ BIOL 3330 Cell Biology
- ☐ BIOL 4320 Molecular Biology
- ☐ CRJ 1050 Intro to Forensic Science
- ☐ CRJ 4850 Forensic Law
- ☐ STAT 2020 Elements of Statistics

Free Electives: (6 Credits)

☐ _____
☐ _____

Suggested Four Year Course Sequence

Year 1

Fall Semester

BIOL 1900 Intro Cell & Molec Biology
CHEM 1108 General Chemistry I
CRJ 1050 Intro to Forensic Sciences
MATH 1410/1230 Pre-calculus or Trigonometry

Spring Semester

ANTH 1000 Intro to Anthropology
CHEM 1128 General Chemistry II
ENGL 1200 English Composition
MATH 2410 Calculus I
General Education Foundation - Technological Literacy[^]

Year 3

Fall Semester

BIOL 3330 Cell Biology
CHEM 4600 Biochemistry I
~And~ CHEM 4605 Biochemistry I Lab
PHYS1500/2500 Physics I*
~And~ PHYS 1510/2510 Physics I Lab*
STAT 2020 Elements of Statistics
General Education - Discoveries - Arts & Humanities[^]

Spring Semester

CHEM 3010 Chem Car Prof Dev II
CHEM 3450 Instrumental Methods
~And~ CHEM 3455 Instrumental Methods Lab
CHEM 4115 Advanced Chemistry Lab
PHYS 1600/2600 Physics II*
~And~ PHYS 1610/2610 Physics II Lab*
Minor Requirement/Elective
General Education - Discoveries - Natural Sci & Tech[^]

Notes:

*Strongly advise PHYS2500/10 and PHYS2600/10 series.

[^]Select General Education courses through faculty advisement.

Year 2

Fall Semester

CHEM 2200 Organic Chemistry I
~And~ CHEM 2205 Organic Chemistry I Lab
CHEM 3400 Quant Chemistry Analysis
~And~ CHEM 3405 Quant Chemistry Analysis. Lab
~Or~ CHEM 3415 Int Chemistry Lab II
MATH 2420 Calculus II
General Education Foundation - Oral Communication[^]

Spring Semester

BIOL 2202 Genetics
CHEM 2010 Chemistry Career & Prof Development I
CHEM 2250 Organic Chemistry II
~And~ CHEM 2255 Organic Chemistry II Lab
~Or~ CHEM 4115 Advanced Chemistry Lab
CHEM 3300 Inorganic Chemistry I
~And~ CHEM 3305 Inorganic Chemistry I Lab
~Or~ CHEM 3315 Intermediate Chemistry Lab

Year 4

Fall Semester

CHEM 4500 Physical Chemistry I
~And~ CHEM 4505 Physical Chemistry I Lab
~Or~ CHEM 4515 Intermediate Lab
CRJ 4850 Forensic Law
Minor/Elective Requirement
General Education - Discoveries - Arts & Humanities[^]
General Education - Discoveries - Social Sciences[^]

Spring Semester

BIOL 4320 Molecular Biology
CHEM 4700 Forensic Analysis
CHEM 4900 Chemistry Capstone
General Education - Discoveries - Arts & Humanities[^]
General Education - Discoveries - Social Sciences[^]

