

**I. CORE CURRICULUM** ..... 44

Courses totaling 26 semester hours must be completed in addition to the 18 semester hours of courses required for the major that will also meet core curriculum requirements (CHE 1101, 1110, 1102, 1120, MAT 1110, ECO 2030 and GHY 1010). Must complete ENG 1000 and 1100, HIS 1101 and 1102, 12 semester hours of humanities (courses must be from three different areas, including one literature course and one fine arts course, 2 semester hours of physical activity/wellness courses.

**II. MAJOR REQUIREMENTS**..... 84

**2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.**

**A. Chemistry (32 semester hours)**

CHE 1101	_____ (3)	Introductory Chemistry I (ND)
CHE 1110	_____ (1)	Introductory Chemistry I Lab
CHE 1102	_____ (3)	Introductory Chemistry II (ND)
CHE 1120	_____ (1)	Introductory Chemistry II Lab
CHE 2201	_____ (3)	Organic Chemistry I
CHE 2203	_____ (1)	Organic Chemistry I Lab
CHE 2202	_____ (3)	Organic Chemistry II
CHE 2204	_____ (1)	Organic Chemistry II Lab (W)
CHE 2210	_____ (4)	Quantitative Analysis (W)
CHE 3000	_____ (1)	Introduction to Chemical Research (S)
CHE 3301	_____ (3)	Physical Chemistry I (C)
CHE 3303	_____ (1)	Physical Chemistry I Laboratory (W)
CHE 3404	_____ (3)	Inorganic Chemistry
CHE 4560	_____ (4)	Instrumental Methods of Analysis (W)

Major Designators

2 Writing (W) \_\_\_\_\_  
1 Speaking (S) \_\_\_\_\_  
Certified Proficiency in Communication (CPC) \_\_\_\_\_  
CPC is met by completion of CHE 2210 (W), CHE 3303 (W), and CHE 3000 (S) with a minimum grade of C- in each course

Other Designators

4 Writing (W) \_\_\_\_\_  
(English 1000 and 1100 will count as 2 W)  
4 Multi Cultural (MC) \_\_\_\_\_  
(History 1101 and 1102 will count as 2 MC)  
2 Numerical Data (ND) \_\_\_\_\_  
2 Computer (C) \_\_\_\_\_  
1 Cross Disciplinary (CD) \_\_\_\_\_

**B. Physics (10 semester hours)**

PHY 1150	_____ (5)	Analytical Physics I (W, ND)
PHY 1151	_____ (5)	Analytical Physics II (W, ND)

**C. Mathematics\* (8 semester hours)**

MAT 1110	_____ (4)	Calculus with Analytic Geometry I (ND)
MAT 1120	_____ (4)	Calculus with Analytic Geometry II (ND)

\*Students taking a college algebra course before MAT 1110 should enroll in MAT 1025, Algebra and Elementary Functions

**D. Other Sciences (8 semester hours)**

BIO 1110	_____ (4)	Concepts of Biology
GLY 1101	_____ (4)	Introduction to Physical Geology (ND)

**E. Environmental Concentration (26 semester hours)**

**1. Science and Mathematics (14 semester hours)**

CHE 4620	_____ (4)	Environmental Chemistry (Prerequisites: CHE 3301, CHE 4560, STT 2810)
BIO 3302	_____ (3)	Ecology (ND, C)
GLY 1103	_____ (4)	Introduction to Environmental & Applied Geology (ND)
STT 2810	_____ (3)	Introduction to Data Analysis & Statistical Inference (ND, C)

**2. Social Science (9 semester hours)**

ECO 2030	_____ (3)	Principles of Economics Price Theory
GHY 1010	_____ (3)	Introduction to Physical Geography
GHY 3100	_____ (3)	Weather and Climate

**3. One of the following (3 semester hours)**

PS 2130	_____ (3)	State and Local Government
PS 3280	_____ (3)	Public Policy Analysis (W)

**III. MINOR (optional)**

**IV. ELECTIVES (taken to total 122 hours for the degree)** ..... 12

2 semester hours of free electives must be outside the major discipline.

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**Recommended Electives**

P&R 1100	_____ (3)	Logic I	CHE 3302	_____ (3)	Physical Chemistry II (C)
GHY 3110	_____ (3)	Vegetation, Soils, and Landforms	CHE 3304	_____ (3)	Physical Chemistry II Laboratory (W)
GHY 4820	_____ (3)	Geographical Hydrology	C S 1440	_____ (3)	Computer Science I (C)
GLY 4620	_____ (4)	Hydrogeology (ND)			