

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

Courses totaling 32 semester hours must be completed in addition to the 12 semester hours of courses required for the major that will also meet core curriculum requirements (CHE 1101, 1110, 1102, 1120 and MAT 1110). 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), 6 semester hours of social science courses selected from two different areas and 2 semester hours of physical activity/wellness courses.

**Recommended humanities course: P&R 1100, Logic I (3 semester hours)**

**Recommended social science course: ECO 2030, Principles of Economic Price Theory (3 semester hours)**

**II. MAJOR REQUIREMENTS.....66-68**

**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 (42 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 3302	_____ (3)	Physical Chemistry II (C)
CHE 3304	_____ (1)	Physical Chemistry II Laboratory (W)
CHE 3404	_____ (3)	Inorganic Chemistry
CHE 3405	_____ (1)	Inorganic Chemistry Lab
CHE 4000	_____ (1)	Chemistry Seminar (S)
CHE 4400	_____ (1)	Senior Research (S) OR CHE 4510_____ (1) Chemistry Honors Thesis
CHE 4560	_____ (4)	Instrumental Methods of Analysis (W)
CHE 4580	_____ (3)	Biochemistry I

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 (ND)
PHY 1151	_____ (5)	Analytical Physics II (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 Science (6-8 semester hours)**

An additional 6-8 semester hours selected from either astronomy, biology, geology, or physics. (Physics courses at the 1000 level, and PHY 3350, are not accepted)

**E. A course in computer programming is also recommended**

(Suggested courses are CS 1440 (C), Computer Science I or CS 1400 (C), Fortran Programming)

**III. MINOR (optional)**

**IV. ELECTIVES (taken to total 122 hours for the degree) .....22-24**

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