

**I. GENERAL EDUCATION CURRICULUM .....44**

*CHE 1101, 1110, 1102, 1120, and MAT 1110 will fulfill General Education requirements.*

**II. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above) .....74**

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 1101/1110	_____ (4)	Introductory Chemistry I & Lab
CHE 1102/1120	_____ (4)	Introductory Chemistry II & Lab (Pre: CHE 1101 & 1110)
CHE 2201	_____ (3)	Organic Chemistry I (Pre: CHE 1102 & 1120; Co: CHE 2203)
CHE 2203	_____ (1)	Organic Chemistry I Lab (Pre: CHE 1102 & 1120; Co: 2201)
CHE 2202	_____ (3)	Organic Chemistry II (Pre: CHE 2201 & 2203 w/minimum grade "C-"; Co: 2204)
CHE 2204	_____ (1)	Organic Chemistry II Lab (Pre: CHE 2201 & 2203 w/minimum grade "C-"; Co: CHE 2202)
CHE 2210	_____ (3)	Quantitative Analysis (Pre: CHE 1102 & 1120; Co: CHE 2211)
CHE 2211	_____ (1)	Quantitative Analysis Lab (Co: CHE 2210)
CHE 3000	_____ (1)	Introduction to Chemical Research (Pre: CHE 2101 or 2201; 2210)
CHE 3301	_____ (3)	Physical Chemistry I (Pre: CHE 2210 & 2211; MAT 1120; PHY 1151)
CHE 3303	_____ (1)	Physical Chemistry I Laboratory [WID] (Pre: RC 2001; Pre/Co: CHE 3301)
CHE 3404	_____ (3)	Inorganic Chemistry (Pre: CHE 2101 & 2102 or 2202 & 2204; CHE 2210 & 2211)
CHE 3560	_____ (3)	Instrumental Methods of Analysis (Pre: CHE 3301 & 3303; Co: 3561)
CHE 3561	_____ (1)	Instrumental Methods of Analysis Lab (Co: 3560)

**B. Physics (13 semester hours)**

PHY 1150	_____ (5)	Analytical Physics I (Co: MAT 1110)
PHY 1151	_____ (5)	Analytical Physics II (Co: MAT 1120)
PHY 3140	_____ (3)	Environmental Physics (Pre: PHY 1104 or 1151)

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

MAT 1110	_____ (4)	Calculus with Analytic Geometry I (Pre: MAT 1025 w/min grade C-)
MAT 1120	_____ (4)	Calculus with Analytic Geometry II (Pre: MAT 1110 w/min grade C-)

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

BIO 1801	_____ (4)	Biological Concepts I (Co: CHE 1101)
GLY 1101	_____ (4)	Introduction to Physical Geology

**E. Environmental Concentration (25 semester hours) Some general education requirements may be double-counted in the major. See your advisor for information.**

**1. Science and Mathematics (16 semester hours)**

BIO 3302	_____ (4)	Ecology (Pre: BIO 1801)
CHE 4620	_____ (4)	Environmental Chemistry [CAP] (Pre: CHE 3301 & 3303, 3560 & 3561; STT 3850)
GLY 1103	_____ (4)	Environmental Change, Hazards, & Resources
STT 3850	_____ (4)	Statistical Data Analysis (Pre: MAT 1110)

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

ECO 2620	_____ (3)	Environmental & Resource Economics
GHY 1010	_____ (3)	Introduction to Physical Geography
P S 2130	_____ (3)	State and Local Government

**III. MINOR (optional)**

**IV. ELECTIVES (taken to total 122 hours for the degree)..... 4**

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

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**Recommended Electives**

CHE 3302	_____ (3)	Physical Chemistry II (Pre: CHE 3301)	GHY 3320	_____ (3)	Environmental Issues in Appalachia
CHE 3304	_____ (1)	Physical Chemistry II Lab (Pre: CHE 3303; Pre/Co: CHE 3302)	GHY 4820	_____ (3)	Geographical Hydrology (Pre: GHY 1010, 3100, 3110)
C S 1440	_____ (3)	Computer Science I (Pre: MAT 1020/1025 w/grade "C-")	GLY 4630	_____ (3)	Hydrogeology (Pre: GLY 2250; MAT 1110; PHY 1103 or 1150; Sr. Stg)
GHY 3100	_____ (3)	Weather and Climate (Pre: GHY 1010)	PHL 1100	_____ (3)	Logic I
GHY 3110	_____ (3)	Vegetation, Soils, & Landforms (Pre: GHY 1010)	P S 3280	_____ (3)	Public Policy Analysis [WID-PS] (Pre: RC 2001)
GHY 3310	_____ (3)	Environmental Remote Sensing			