

**Bachelor of Science (BS)**  
**Degree Code 214\***  
**Concentration Code 214G**

**Checksheet for Chemistry Majors**  
**ENVIRONMENTAL**

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

CHE 1101/1110 and 1102/1120 fulfills the Science Inquiry Perspective. MAT 1110 fulfills the Quantitative Literacy requirement.

**II. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above).....73**

**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	____ (2)	Quantitative Analysis (Pre: CHE 1102/1120; Co : CHE 2211)
CHE 2211	____ (2)	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; MAT 1120; 1 year PHY)
CHE 3303	____ (1)	Physical Chemistry I Laboratory [WID] (Co: CHE 3301; Pre: ENG 2001)
CHE 3404	____ (3)	Inorganic Chemistry (Pre: CHE 3301)
CHE 3560	____ (3)	Instrumental Methods of Analysis (Pre: CHE 3301; 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 of C-)
MAT 1120	____ (4)	Calculus with Analytic Geometry II (Pre: MAT 1110 w/min grade of 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 (24 semester hours)**

**1. Science and Mathematics (15 semester hours)**

CHE 4620	____ (4)	Environmental Chemistry [CAP] (Pre: CHE 3301, 4560; STT 2810)
BIO 3302	____ (4)	Ecology (Pre: BIO 1801)
GLY 1103	____ (4)	Introduction to Environmental & Applied Geology
STT 2810	____ (3)	Introduction to Statistics (Pre: MAT 1010)

**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)..... 5**

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

**122**

**Recommended Electives**

PHL 1100	____ (3)	Logic I	CHE 3302	____ (3)	Physical Chemistry II (Pre: CHE 2210, MAT 1120, 1 yr PHY)
GHY 3110	____ (3)	Vegetation, Soils, & Landforms (Pre: GHY 1010)	CHE 3304	____ (3)	Physical Chemistry II Laboratory (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-")
GHY 3310	____ (3)	Environmental Remote Sensing	GHY 3100	____ (3)	Weather and Climate (Pre: GHY 1010)
GLY 4630	____ (3)	Hydrogeology (Pre: Jr/Sr standing; 6 sh GLY ≥ 1000)	GHY 3320	____ (3)	Environmental Issues in Appalachia
GHY 3820	____ (3)	GIS for the Environ & Social Science	P S 3280	____ (3)	Public Policy Analysis

Major Requirements that count in Gen Education:	
Quantitative Lit	
MAT 1110	4 s.h.
Science Inquiry	
CHE 1101/1110	4 s.h.
CHE 1102/1120	4 s.h.
Perspectives (depends on choices)	
ECO 3620	3 s.h.
Total Major hrs:	85
Gen Ed-up to 15 hrs:	- 15
Net Major hrs:	70