

- 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) .....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)**
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|---------------|-----------|--|
| 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: ENG 2001; Pre/Co: CHE 3301)          |
| 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 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) ECO 2620 or GHY 1010 may be used in General Education Perspectives.**
- 1. Science and Mathematics (16 semester hours)**
- |          |           |   |
|----------|-----------|---|
| BIO 3302 | _____ (4) | Ecology (Pre: BIO 1801)   |
| CHE 4620 | _____ (4) | Environmental Chemistry [CAP] (Pre: CHE 3301, 3560, 3561; STT 2810) |
| 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. 122**  
Total major = 86 hrs; Gen Ed courses may count in major (depends on choices) – up to 15; net major 71 hours.

**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: Jr. standing; 6 sh GLY ≥ 1000)
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
GHY 3310 _____ (3) Environmental Remote Sensing	