

I. CORE CURRICULUM 44

Math 1110 will count toward math requirement. Either Chemistry 1101 and 1110, 1102 and 1120 or Physics 1150, 1151 will count toward science requirement.

II. MAJOR REQUIREMENTS..... 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. Since many upper level Geology courses require GLY 1101 and GLY 1102 as prerequisites, it is highly recommended that students complete these courses during their freshman year.

A. Geology (34 semester hours above the 1000 level):

- GLY 2215 _____ (4) Earth Materials
- GLY 2735 _____ (3) Preparation of Geologic Reports (W, C, S)
- GLY 3150 _____ (3) Principles of Structural Geology and Tectonics (ND, C)
- GLY 3215 _____ (3) Introduction to Crystal Chemistry and Optical Mineralogy (ND)
- GLY 3715 _____ (3) Petrology and Petrography (W)
- GLY 3800 _____ (3) Introduction to Stratigraphy and Sedimentology
- GLY 4024 _____ (4) Paleontology & Historical Geology (W, CD, ND)
- GLY 4210 _____ (1) Geology Seminar
- GLY 4835 _____ (6) Summer Field Geology or other approved field course

And choose 4 semester hours from the following:

- GLY 4620 _____ (4) Hydrogeology (ND) **OR** GLY 4703 _____ (4) Advanced Env. & Engineering Geology

OR BOTH

- GLY 4501 _____ (1) Senior Research **AND** GLY 4510 (3) _____ Senior Honors Thesis (W)

B. 8 semester hours Advisor Approved Non-Geology Courses _____

C. Mathematics/Chemistry/Physics (26 hours)

- MAT 1110 _____ (4) Calculus with Analytic Geometry I (ND)
- MAT 1120 _____ (4) Calculus with Analytic Geometry II (ND)
- 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
- PHY 1150 _____ (5) Analytical Physics I (ND)
- PHY 1151 _____ (5) Analytical Physics II (ND)

<u>Major Designators</u>	
2 Writing (W)	_____
1 Speaking (S)	_____
Certified Proficiency in Communication (CPC)	_____
Passing grade on 2 nd speech in GLY 2735 & grade of D or better in GLY 2735	
<u>Other Designators</u>	
4 Writing (W)	_____
4 Multi Cultural (MC)	_____
2 Numerical Data (ND)	_____
2 Computer (C)	_____
1 Cross Disciplinary (CD)	_____

D. Six semester hours of statistics, such as

- STT 2810 _____ (3) Introduction to Statistics (ND, C)
- STT 3820 _____ (3) Statistical Methods I (ND, C)

Or other Geology advisor approved courses based on statistical applications _____

OR 6 semester hours of geology advisor-approved computer science or computing courses

- CS 1400 _____ (3) FORTRAN Programming (C)
- CS 1425 _____ (3) Overview of Computer Science (C)
- CS 1440 _____ (4) Computer Science I (C)
- GHY 2310 _____ (3) Cartographic Design & Analysis
- GHY 3812 _____ (3) Introduction to GIS (ND, C)
- GHY 4812 _____ (3) Advanced GIS (ND, C)

Other _____

During the senior year the B.S. (non-teaching) student must take and achieve a satisfactory score on a COMPREHENSIVE EXAMINATION covering theoretical and practical aspects in areas of geology. Students who are unsuccessful on portions or all of the examination may retake appropriate portions up to two additional times prior to graduation.

III. MINOR (optional)

IV. ELECTIVES (taken to total 122 hours for the degree) 16

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

Total 134

Minus hours double counted in core

-12

Total hours must equal

122