

I. GENERAL EDUCATION CURRICULUM44

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

II. MAJOR REQUIREMENTS (not including 12 hours counted in Area I, above)65-66

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. Geology (37 semester hours):

Choose one 1000-level geology course:

- GLY 1101 _____ (4) Introduction to Physical Geology
- GLY 1102 _____ (4) Introduction to Historical Geology
- GLY 1103 _____ (4) Environmental Change, Hazards, & Resources
- GLY 1104 _____ (4) Water: Mountains to Sea
- GLY 1105 _____ (4) Oceanography

- GLY 2250 _____ (4) Evolution of the Earth (*Pre: GLY 1101, 1102, 1103, 1104, or 1105*)
- GLY 2745 _____ (4) Preparation of Geologic Reports [**WID**] (*Pre: RC 2001, GLY 2250*)
- GLY 3150 _____ (3) Principles of Structural Geology and Tectonics (*Pre: GLY 2250, 2745*)
- GLY 3220 _____ (3) Fundamentals of Mineralogy (*Pre: GLY 2250*)
- GLY 3715 _____ (3) Petrology and Petrography (*Pre: CHE 1101 & 1110; GLY 2250, 2745, 3220*)
- GLY 3800 _____ (3) Sedimentology and Stratigraphy (*Pre: GLY 2250*)
- GLY 4210 _____ (1) Geology Seminar [**CAP**] (*Pre: Sr. standing*)
- GLY 4835 _____ (6) Summer Field Geology or other approved field course (*Pre: GLY 3150, 3715, 3800*)

3 s.h. GLY electives from the following list of laboratory course (GLY 3025, 3131, 3160, 3333, 3455, 4630, 4705) _____

3 s.h. GLY electives at or above 3000 level (excluding GLY 3520) _____

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

C. Mathematics/Chemistry/Physics (26 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-*)
- CHE 1101 _____ (3) Introductory Chemistry I (*Co: CHE 1110*)
- CHE 1110 _____ (1) Introductory Chemistry I Lab (*Co: CHE 1101*)
- CHE 1102 _____ (3) Introductory Chemistry II (*Pre: CHE 1101; Co: 1120*)
- CHE 1120 _____ (1) Introductory Chemistry II Lab (*Co: CHE 1102*)
- PHY 1150 _____ (5) Analytical Physics I (*Co: MAT 1110*)
- PHY 1151 _____ (5) Analytical Physics II (*Co: MAT 1120*)

D. Computer Science, Computing, or Statistics (6 -7 hours) Choose at least 6 hours of statistics

STT 2810 _____ (3) Introduction to Statistics (*Pre: MAT 1010*)

STT 3820 _____ (3) Statistical Methods I (*Pre: STT 2810/2820*)

Or other Geology advisor approved courses based on statistical applications _____

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

CS 1440 _____ (4) Computer Science I (*Pre: MAT 1020/1025 w/minimum grade "C-"*)

CS 1445 _____ (4) Intro to Programming w/Interdisciplinary Applications (*Pre: MAT 1020 or 1025 with C- or higher*)

GHY/PLN 2812 _____ (3) Geospatial Data and Technology

GHY 3812 _____ (3) Introduction to GIS (*Pre: GHY 2310, 2812*)

GHY 4812 _____ (3) Advanced GIS (*Pre: GHY 3812*)

GLY/ENV 3455 _____ (3) Quantitative Data Analysis for Earth & Environmental Scientists (*Pre: GLY 2250; MAT 1110; PHY 1150*)

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).....12-13

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