

I. GENERAL EDUCATION CURRICULUM..... 44

Chemistry 1101/1110 & 1102/1120 fulfill the Science Inquiry. MAT 1110 fulfills the Quantitative Literacy requirement.

II. MAJOR REQUIREMENTS (not including 12 hours counted in Area I, above)..... 75-76

2.0 major GPA required for graduation. Major GPA calculation includes 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 (34 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 3025 ____ (3) Principles of Paleontology (Pre: GLY 2250 or 6 sh ≥ 2000 BIO or ANT)
GLY 3150 ____ (3) Principles of Structural Geology and Tectonics (Pre: GLY 2250, 2745)
GLY 3220 ____ (3) Fundamentals of Mineralogy (Pre/Co: GLY 2745; CHE 1101 & 1110)
GLY 3715 ____ (3) Petrology and Petrography (Pre: CHE 1101 & 1110; GLY 2250, 2745, 3220)
GLY 3800 ____ (3) Sedimentology and Stratigraphy (Pre: GLY 2250 & 2745)
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)

B. Geology & Paleontology Electives (choose 6 hours from the following)

- GLY 2857 ____ (1-3) Paleontology Field & Museum Methods (Pre: GLY 2250)
GLY 3333 ____ (3) Geomorphology (Pre: 6 s.h. GLY)
ENV/GLY 3455 ____ (3) Quantitative Data Analysis for Earth/Env Sci (Pre: GLY 2250; MAT 1110; PHY 1150)
GLY 3131 ____ (3) Environmental Geochemistry (Pre: CHE 1101/1110; MAT 1110; GLY 2250)
GLY 3264 ____ (1-3) Paleontology Lab & Analytical Techniques (Pre: GLY 3025)
GLY 4501 ____ (1-3) Senior Research (Pre: 3.25 GPA in GLY; Sr stdg)
GLY 4510 ____ (3) Sr Hon Thesis (Pre: GLY 4501; Sr. stdng; 3.25 GPA in GLY)
GLY 4630 ____ (3) Hydrogeology (Pre: GLY 2250; MAT 1110; PHY 1103 or 1150)
GLY 4705 ____ (3) Engineering Geology (Pre: 6 s.h. GLY ≥ 2000; Jr stdng)

C. Evolutionary Component (18 semester hours)

BIO 1801 ____ (4) Biological Concepts I (Co: CHE 1101)

And 14 hours evolutionary science from the following list:

- ANT 2230 ____ (3) Biological Anthropology
ANT 3200 ____ (3) Zooarchaeology (Pre: ANT 2221)
BIO 1802 ____ (4) Biological Concepts II (Co: CHE 1101)
ANT 3220 ____ (3) Human Biological Variation (Pre: RC 2001)
ANT 3300 ____ (3) Human Osteology (Pre: ANT 2230 w/min grade "C")
E S 2031 ____ (3) Human Anat & Physiology (Pre: BIO 1801; CHE 1101)

Any BIO course above the 2000 level (except BIO 2800, 3520, 4550, 4563) or other advisor-approved electives _____

D. Mathematics/Chemistry/Physics (29-30 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-)
CHE 1101/1110 ____ (4) Introductory Chemistry I & Lab (Pre: MAT 1020 or higher)
CHE 1102/1120 ____ (4) Introductory Chemistry II & Lab (Pre: CHE 1101 & 1110; MAT 1020 or higher)
PHY 1150 ____ (5) Analytical Physics I (Co: MAT 1110)
PHY 1151 ____ (5) Analytical Physics II (Co: MAT 1120)

Choose one of the following statistics courses:

- STT 2810 ____ (3) Introduction to Statistics (Pre: MAT 1010 or higher) OR STT 2820 ____ (4) Reasoning with Statistics

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 125 hours for the degree)..... 5-6

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