Bachelor of Science (BS) Non-Teaching
Degree Code 259D

I. GENERAL EDUCATION CURRICULUM .................................................................................................................. 44
Chemistry 1101/1110 & 1102/1120 fulfill the Science Inquiry perspective. MAT 1110 fulfills the Quantitative Literacy requirement.

II. MAJOR REQUIREMENTS (not including 12 hours counted in Area I, above) .......................................................... 75
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 (37 semester hours):
   - GLY 1101 _____ (4) Introduction to Physical Geology OR GLY 1510 _____ (4) Geological Science Honors (Pre: MAT 1020)
   - GLY 2250 _____ (4) Evolution of the Earth (Pre: GLY 1101,1102,1103,1104, or 1105)
   - GLY 2745 _____ (4) Preparation of Geologic Reports [WID] (Pre: ENG 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: GLY 2250)
   - GLY 3715 _____ (3) Petrology and Petrography (Pre: CHE 1101/1110; GLY 2250, 2745, 3220)
   - GLY 3800 _____ (3) Introduction to Stratigraphy and Sedimentology (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)
   - And choose 3 semester hours geology electives at or above 3000 level
     - GLY 3333 _____ (3) Geomorphology (Pre: 6 s.h. GLY)
     - GLY 4501 _____ (1) Senior Research (Pre: 3.25 GPA in GLY)
     - GLY 4630 _____ (3) Hydrogeology (Pre: 6 s.h. GLY ≥ 2000)
     - GLY 3530-49 _____ (3) Special Topics

B. Biological Component (18 semester hours Biology)
   - BIO 1801 _____ (4) Biological Concepts I (Co: CHE 1101)
   - And either
     - BIO 2000 _____ (4) Introduction to Botany (Pre: BIO 1801)
     - BIO 2001 _____ (4) Introduction to Zoology (Pre: BIO 1801)
   - And 10 semester hours of BIO at or above the 2000 level (excluding 2800, 3520, 4550, 4563):

C. Mathematics/Chemistry/Physics (26 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
   - CHE 1102/1120 _____ (4) Introductory Chemistry II & Lab (Pre: CHE 1101/1110)
   - PHY 1150 _____ (5) Analytical Physics I (Co: MAT 1110)
   - PHY 1151 _____ (5) Analytical Physics II (Co: MAT 1120)

D. Computer science/programming, GIS, or statistics courses (Choose 6 semester hours)
   - C S 1425 _____ (3) Overview of Computer Science (Co: MAT 1020/1025)
   - GHY 2310 _____ (3) Cartographic Design & Analysis
   - GHY 3310 _____ (3) Environmental Remote Sensing
   - GHY 3812 _____ (3) Introduction to GIS (Pre: GHY 2310, 2812)
   - STT 2810 _____ (3) Introduction to Statistics (Pre: MAT 1010)
   - STT 3820 _____ (3) Statistical Methods I (Pre: STT 2810/2820)

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) ............................................................................................. 6
2 semester hours of free electives must be outside the major discipline. Total hours must equal 125