Bachelor of Science (BS)  Program of Study for Geology Majors
Degree Code 259*              GEOLOGY
Concentration Code 259F         SECONDARY EDUCATION LICENSURE

I. GENERAL EDUCATION CURRICULUM ................................................................................................................................. 44
   Geology 1101 and 1103 fulfill Science Inquiry perspective in general education. MAT 1110 fulfills the Quantitative Literacy requirement.

II. PROFESSIONAL EDUCATION REQUIREMENTS .................................................................................................................. 24
   A minimum grade of C is required in each professional education course. CI 2300 & FDN 2400 are required prior to admission to Teacher Educ.

   CI 2300 _____ (2) Teaching and Learning in the Digital Age (Entry course to teacher education)
   FDN 2400 _____ (2) Critical Perspectives on Teaching and Learning (Pre or Co: CI 2300) (Entry course to teacher education)
   PSY 3010 _____ (3) Psychology Applied to Teaching (Pre or Co: CI 2300)

   PROFICIENCIES:
   SPE 3300* _____ (3) Creating Inclusive Learning Communities (Pre: CI 2300, FDN 2400, PSY 3010)
   CI 3400* _____ (2) Policies and Practice in Educational Assessment (Pre: CI 2300, FDN 2400, PSY 3010) English _____
   CI 4900 _____ (12) Student Teaching [CAP] (All courses in professional core must be completed with grades of C (2.0) or higher prior to student teaching, along with other courses (including methods and reading) identified within the major.

   *Admission to Teacher Education required.
   
   NOTE: To be admitted to the Teacher Education Program students must take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.

III. MAJOR REQUIREMENTS (not including 12 hours counted in Area I, above) ........................................................................ 52
   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 III.
   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 as a prerequisite, it is highly recommended that students complete this course during their freshman year.

   A. Geology Courses (28 hours)
   GLY 1101 _____ (4) Introduction to Physical Geology
   or GLY 1510 _____ (4) Geological Science Honors-Physical
   GLY 1103 _____ (4) Environmental Change, Hazards, & Resources
   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: ENG 2001, GLY 2250)
   GLY 3220 _____ (3) Fundamentals of Mineralogy (Pre: GLY 2250)
   GLY 3333 _____ (3) Geomorphology (Pre: 6 s.h. GLY)
   GLY 3520 _____ (1) Instructional Asst for GLY 1101 (Pre: Jr/Sr standing)
   GLY 3521 _____ (1) Secondary Science Field Experience (Pre: Jr/Sr standing)

   B. At least 12 semester hours selected from the following:
   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 1103 _____ (4) General Physics I (Co: MAT 1020 or 1025)
   PHY 1104 _____ (4) General Physics II (Pre: PHY 1103)

   C. Also required (24 hours):
   G S 4403 _____ (3) Teaching Science in the Middle and High Schools [WID] (minimum “C” grade required) (Pre: ENG 2001)
   R E 4630 _____ (2) Reading in the Content Areas (minimum “C” grade required)
   AST 1001 _____ (4) Introductory Astronomy I – The Solar System
   AST 1002 _____ (4) Introductory Astronomy II – Stars and Galaxies (Pre: AST 1001)
   BIO 1801 _____ (4) Biological Concepts I (Co: CHE 1101)
   G HY 3100 _____ (3) Weather and Climate (Pre: G HY 1010)
   MAT 1110 _____ (4) Calculus with Analytic Geometry I (Pre: MAT 1025 w/min grade C-)

   During the senior year, the B.S. Geology Teaching Licensure degree student must take the Praxis II subject area exam: Earth/Space Science (#0570) portion. The score should be reported to Appalachian State University.

IV. MINOR (optional)

V. ELECTIVES (taken to total 122 hours for the degree)........................................................................................................... 2
   2 semester hours of free electives must be outside the major discipline
   Total major requirements – 64; Gen Ed courses that may count in major (depends on choices) – 12; net major 52 hours;