Bachelor of Science (BS) Non-Teaching  
Degree Code 244A  

Checksheet for Geology Majors

I. GENERAL EDUCATION CURRICULUM .................................................................................................................. 44
CHE 1101/1110 and 1102/1120 fulfills the Science Inquiry perspective.

II. MAJOR REQUIREMENTS (not including 8 hours counted in Area I, above) .................................................. 69
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 as a prerequisite, it is highly recommended that students complete this course during their freshman year.

A. Geology (37 semester hours):
- GLY 1101 _____ (4) Introduction to Physical Geology OR GLY 1510 _____ (4) Geological Science Honors
- GLY 2250 _____ (4) Evolution of the Earth (Pre: GLY 1101)
- GLY 2745 _____ (4) Preparation of Geologic Reports [WID] (Pre: ENG 2001; GLY 1101, 2250)
- GLY 3150 _____ (3) Principles of Structural Geology and Tectonics (Pre: GLY 2250, 2745)
- GLY 3220 _____ (3) Fundamentals of Mineralogy (Pre: GLY 1101)
- GLY 3715 _____ (3) Petrology and Petrography (Pre: CHE 1101/1110, GLY 2250, 2745, 3220)
- GLY 3800 _____ (3) Introduction to Stratigraphy and Sedimentology (Pre: GLY 1102, 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)

6 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 with grade of C- or better)
- MAT 1120 _____ (4) Calculus with Analytic Geometry II (Pre: MAT 1110 with grade of C- or better)
- 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. Six semester hours of statistics, such as
- STT 2810 _____ (3) Introduction to Statistics (Pre: MAT 1010)
- STT 3820 _____ (3) Statistical Methods I (Pre: STT 2810 or 2820)

Or other Geology advisor approved courses based on statistical applications ____________________________

OR 6 semester hours of geology advisor-approved computer science or computing courses
- CS 1425 _____ (3) Overview of Computer Science (Co: MAT 1020 or 1025)
- CS 1440 _____ (4) Computer Science I (Pre: MAT 1020/1025 w/minimum grade “C-“)
- GHY 2310 _____ (3) Cartographic Design & Analysis
- GHY 3812 _____ (3) Introduction to GIS (Pre: GHY 2310, 2812)
- GHY 4812 _____ (3) Advanced GIS (Pre: GHY 3812)

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) ......................................................................................... 9
2 semester hours of free electives must be outside the major discipline. 122

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