EARTH SCIENCES EDUCATION (ESSE) BACHELOR of ARTS
With Concurrent Major in Geology
Wyoming Teacher Education Program

Total credit requirement: 122 minimum
48 credit hours must be upper division

Effective Spring 2008
Updated: March 2008

UNIVERSITY STUDIES PROGRAM REQUIREMENTS

CORE COMPONENTS:

Intellectual Community (1 course, 1-4 credits)
   ___ (I) _______________________________________
   Not required if transferring 16 or more credits to UW from any institution.

Writing 1 (1 course, minimum 3 credits)
   ___ (WA) ENGL 1010

Quantitative Reasoning (2 courses, 6-8 credits)
   ___ (QA) _____________________________________
   ___ (QB) STAT 2050

Natural Sciences (4-8 credits) (S, SB, SP, or SE)
   ___ (SE) ASTR 1050 OR ATSC 2000
   ___ (SP) PHYS 1050

Cultural Context (3 courses, 9 credits)
   (3 hours from each area; can substitute C for ONE area)
   ___ Humanities (CH): ___________________________
   ___ Social Science (CS): EDST 2450
   ___ Arts (CA): _________________________________

Oral Communication (1 course, 3 credits)
   ___ (O) EDST 3000

US & Wyoming Constitution (1 course, 3 credits)
   ___ (V) POLS 1000, ECON 1200, HIST 1211, 1221, or 1251

Physical Activity & Health (1 course w/ 2 parts, 1 credit)
   ___ (P) PEAC 1001 ___________________________

EMBEDDABLE COMPONENTS

May be part of another course (ordinarily a 3 credit course) or courses dedicated solely to this component.

Information Literacy (1 course)
   ___ (L) ITEC 2360

Writing 2 & 3 (2 courses)
   ___ (WB) EDST 3000
   ___ (WC) EDSE 4275

Global Awareness (1 course)
   ___ (G) GEOG 4040

Diversity in the United States (1 course)
   ___ (D): EDST 2480

PROFESSIONAL EDUCATION REQUIREMENTS:

Professional Ed courses must be completed with a grade of C or better.

   ___ EDST 2450 (3) Human Lifespan Development (CS)
   ___ ITEC 2360 (3) Teaching with Technology (L)
   ___ 2.50 UW Total Institution GPA
   ___ Sophomore standing (30+ credits)

The above criteria must be met prior to enrollment in PHASE I:

   ___ EDST 2480 [2000] (4) Diversity & the Politics of Schooling (D)
   ___ EDEX 2484 (3) Intro to Special Education
   ___ C or better in QA
   ___ C or better in WA
   ___ Current Wyoming Substitute Teaching Permit
   ___ 2.75 UW Total Institution GPA
   ___ Junior standing (60+ credits)

   ___ Application is due one semester prior to enrollment.

The above criteria must be met prior to enrollment in PHASE II:

   ___ EDST 3000 (6) Teacher as Practitioner (O & WB)
   ___ 2.75 UW Total Institution GPA
   ___ 2.50 GPA (content)
   ___ EDSE 3275 (3) Methods I: Secondary Science Ed.
   (Offered fall semester only.)
   ___ Application is due one year prior to enrollment.

The above criteria must be met prior to enrollment in PHASE III

Methods II & Residency

Phase IIIa: Methods

   ___ EDSE 4275 (3) Methods II: Secondary Science Ed. (WC)
   (Offered fall semester only.)
   ___ EDST 3550 [3500] (2) Educational Assessment

* Can be taken upon successful completion of Phase I and QA requirement.

PHASE IIIb: Residency

   ___ EDSE 4500 (15) Residency in Teaching

• Effective Fall 2006. Concurrent Majors required for all incoming freshmen and transfer students in this degree program.
• Minimum 2.75 cumulative GPA and minimum 2.5 content GPA required.
GEOLOGY MAJOR CONTENT: 63 HOURS (minimum)

Minimum 2.50 GPA required in major content. All major content courses must be completed with a grade of C or better.

REQUIRED GEOLOGY COURSES: 30 Hours

_____ ASTR 1050 (4) Survey of Astronomy (SE)
_____ ATSC 2000 (4) Introduction to Meteorology (SE)
_____ GEOG 4040 (3) Conservation of Natural Resources (CS, G)
_____ GEOL 1100 (4) Physical Geology (SE)
_____ GEOL 2000 (4) Foundations of Geology I (SE)
_____ GEOL 2100 (4) Stratigraphy and Sedimentation
_____ GEOL 2080 (4) General Field Geology OR
     GEOL 3080 (4) General Field Geology (SE & WC)
_____ GEOL 4820 (3) Capstone

REQUIRED ELECTIVES: 15 Hours

_____ STAT 2050 (4) Fundamentals of Statistics
_____ CHEM 1000 (4) Introductory Chemistry OR
     CHEM 1020 (4) General Chemistry I
_____ LIFE 2002 (3) Global Ecology
_____ PHYS 1050 (4) Concepts of Physics

ELECTIVE COURSES: 18 Hours (minimum)

At least one course from the Environmental Geology Emphasis and an additional 15 hours from one Emphasis Area. A minimum 13 upper division credits are required for a total of 48.

EMPHASIS AREAS (3 Options)

1) ENVIRONMENTAL GEOLOGY:

_____ ATSC 2100 (3) Atmospheric Change: Comp. & Climate
_____ GEOL 2070 (4) Introduction to Oceanography
_____ GEOG 3010 (3) Landforms and Soil
_____ GEOG 3450 (3) Weather and Climate
_____ GEOG 3550 (3) Natural Hazards and Society (CS) OR
     GEOL 3400 (4) Geologic Hazards
_____ GEOL 3500 (4) Global Change: A Geological Perspective
_____ BOT/GEOG/GEOL 4111 (3) Remote Sensing of Env. OR
     BOT/GEOG 3150 (3) Survey of Remote Sensing Apps.
_____ GEOL 4112 (2) Remote Sensing: Applications in Geology
_____ GEOL 4444 (4) Geohydrology
_____ GEOL 4490 (3) Geochemistry
_____ GEOL 4880 (3) Earth Surface Processes

2) GENERAL GEOLOGY:

_____ ATSC 4010 (3) Atmospheric Processes
_____ GEOG 1010 (4) Introduction to Physical Geography (SE)
_____ GEOL 2005 (4) Foundations of Geology II
_____ GEOL 2050 (3) Principles of Paleontology
_____ GEOL 4050 (3) Geology of Wyoming
_____ GEOL 4060 (1) Rocky Mountain Field Trip
_____ GEOL 4500 (3) Photogeology
_____ GEOL 4610 (4) Structural Geology and Tectonics

3) EARTH & MINERAL RESOURCES:

_____ GEOL 2010 (3) Mineralogy
_____ GEOL 3600 (3) Earth & Mineral Resources
_____ GEOL 3605 (3) Energy Resources
_____ GEOL 3650 (4) Energy: A Geological Perspective
_____ GEOL 4190 (3) Petroleum Geology
_____ GEOL 4720 (4) Ore Deposits

Students must complete at least 19 upper division credits in the major content to total 48.