The geological sciences encompass a variety of types of studies of the Earth, including considerations of composition, structure, prehistoric life, internal and surficial processes, and geological history. These studies have applications in the discovery and use of mineral resources, fuels, and water; in protection of the environment; and in planning for natural limitations (earthquakes, landslides, resources, etc.) on societal development. Students undertake the study of geological sciences in the classroom, laboratory, and field.

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. A complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, can be found on page 96 of the 2004-2005 UK Bulletin.

130 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. A complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, can be found on page 96 of the 2004-2005 UK Bulletin.

University Studies Program Requirements

I. Math (completed by Premajor Requirement) ............................................. 0-8
II. Foreign Language (placement exam recommended) ............................. 0-8
III. Inference–Logic (completed by Premajor Requirement) ...................... 3-6
IV. Written Communication .................................................................... 3-6
V. Oral Communication .......................................................................... 3
VI. Natural Sciences (completed by Premajor Requirement) .................... 6
VII. Social Sciences .................................................................................. 6
VIII. Humanities ....................................................................................... 6
IX. Cross-Cultural (choose a 200+ Social Science course) ................. 3
X. Electives (choose 1 Humanities courses) ......................................... 3

USP hours: ...................................................................................... 24-35

College Requirements

I. Foreign Language (placement exam recommended) .............................. 0-8
II. Disciplinary Requirements
   a. Natural Science (completed by Major Requirements) .................
   b. Social Science (completed by USP Cross-Cultural Requirement) ...
   c. Humanities (completed by USP Elective Requirement) .............
III. Laboratory or Field Work (completed by Premajor Requirement) ....
IV. Electives ....................................................................................... 6

College Requirement hours: ............................................................... 6-14

Premajor Requirements

MA 113 Calculus I ................................................................................ 4
MA 114 Calculus II ............................................................................... 4
*CHE 105 General College Chemistry I .......................................... 3
*CHE 107 General College Chemistry II ......................................... 3
CHE 115 General Chemistry Laboratory ........................................... 3
GLY 220 Principles of Physical Geology ............................................
or
GLY 223 Introduction to Geology in the Rocky Mountains ............ 4-6
GLY 230 Fundamentals of Geology I ............................................... 3
GLY 235 Fundamentals of Geology II ............................................. 3
GLY 295 Geoscience Orientation ....................................................... 1
Premajor hours: ........................................................................... 28-30

Major Requirements

Major Core Requirements
GLY 323 Field Work in Regional Geology ....................................... 6
GLY 360 Mineralogy .......................................................................... 4
GLY 420G Structural Geology .............................................................. 4
GLY 450G Sedimentary Geology .......................................................... 4
GLY 461 Igneous and Metamorphic Petrology .................................... 4
GLY 490 Earth Dynamics ............................................................... 3

Major Core hours: ........................................................................... 25

Other Course Work Required for the Major

From the Major Department:
Elective I ....................................................................................... 6
Choose 6 hours of GLY courses at the 400+ level, not to include GLY 495 or 496
Elective II ....................................................................................... 6
Choose 6 additional hours of 300+ GLY or related courses

From the Physics Department
PHY 211/213 General Physics or
PHY 231/232/241/242 General University Physics ........................ 10

NOTE: Fourteen hours must be completed outside Geology. Partial fulfillment of this requirement can be completed by the PHY Sequence, the USP Cross-Cultural, and GLY Elective II Requirements ............................. 0-4

Other Major hours: ........................................................................ 22

Total Minimum Hours Required for Degree ........................................ 130

*Course used towards completion of a USP Requirement.