

# Science

## Associate of Science—Geosciences (Pattern of Study)

### Student Learning Outcomes

The geosciences pattern of study is for students planning on transferring to a college or university that offers a bachelor's degree in geology or a related field of science. With careful selection of electives for the AS degree, students may also find opportunities for employment as technicians within the mining industry, environmental consulting firms, or some state and federal agencies. To best prepare for transfer of this degree to a bachelor's program, students should first visit with the geosciences faculty advisor at GBC, then work to create a schedule in coordination with the catalog requirements of the college into which the student wishes to transfer. The proper selection of classes will affect the efficiency of how well the degree will transfer, or how well it will assist in obtaining employment.

Upon completion of the program students will earn an AS degree and ability to:

- Describe the fundamental principles of the Geosciences.
- Transfer to a four-year program in the physical or earth sciences or work as a technician in jobs requiring geosciences technicians.

### Degree Requirements Credits

#### General Education

##### Communications and Expressions

Written Communications ..... 3  
ENG 100, ENG 101

Oral Communications ..... 3  
COM 101, THTR 102, THTR 221

Evidence-Based Communications ..... 3  
ENG 102

Fine Arts ..... 3  
ART 100, ART 101 (recommended), ART 107,  
ENG 205, MUS 101, THTR 100, THTR105, THTR 204

##### Logical and Scientific Reasoning

Mathematical Reasoning ..... 3  
MATH 126 or higher, or STAT 152  
MATH 181 or MATH 182 (preferred)

Scientific Reasoning—GEOL 101 (required) ..... 4

Scientific Data Interpretation—CHEM 121 (required) ..... 4

##### Human Societies and Experience

Structure of Societies ..... 3  
ANTH 101, ANTH 201, ANTH 202, CRJ 104, ECON 102,  
ECON 103, GEOG 106, HMS 200, PSY 101, PSY 208,  
SOC 101

American Constitutions and Institutions: ..... 3  
HIST 101/102 (must take both) or PSC 101

Humanities ..... 3  
ART 160, ART 260, ART 261, ENG 203, ENG 223,  
FIS 100, FREN 111, FREN 112, HIST 105, HIST 106,  
HIST 208, HIST 209, HUM 101, HUM 111, MUS 121,  
MUS 125, PHIL 102, PHIL 129, SPAN 111, SPAN 112,  
SPAN 211

Technological Proficiency—GIS 109 (required) ..... 3

### Foundations

Mathematics ..... 2-4  
Any MATH 127 or higher, or STAT 152  
(Minimum 5 total credits mathematics)

Science—GEOL 102 (required) ..... 4  
(Minimum 12 total credits science)

### Program Requirements

CHEM 122 General Chemistry II ..... 4

PHYS 151 General Physics I, or

PHYS 180 Physics for Scientists and  
Engineers I (preferred) ..... 4

PHYS 152 General Physics II, or

PHYS 181 Physics for Scientists and  
Engineers II (preferred) ..... 4

### Program Electives (Choose with advisor) ..... 9

Recommended electives: BIOL 190, ENV 100, GEOL 201,  
and GEOG 103.

**Note:** All students graduating from Nevada institutions of higher education must satisfy the American Constitutions and Institutions requirement. PSC 101 (3 credits) or HIST 101 and HIST 102 (6 credits).

**SUGGESTED COURSE SEQUENCE**  
**(Refer to page 87)**  
**AS—Geosciences**

<b>FALL—1st Semester</b>		<b>Credits</b>
CHEM	121	4
ENG	100 or 101	3
GEOL	101	4
MATH	126 or 181	3-4
<b>TOTAL</b>		<b>14-15</b>

<b>SPRING—2nd Semester</b>		<b>Credits</b>
CHEM	122	4
ENG	102	3
GEOL	102	4
MATH	127 or 182	3-4
ORAL COMMUNICATIONS		3
<b>TOTAL</b>		<b>17-18</b>

<b>FALL—3rd Semester</b>		<b>Credits</b>
PHYS	151 or 180	4
PROGRAM ELECTIVE **		3-4
HUMANITIES*		3
STRUCTURE OF SOCIETIES*		3
GIS	109	3
<b>TOTAL</b>		<b>16-17</b>

<b>SPRING—4th Semester</b>		<b>Credits</b>
FINE ARTS*		3
PHYS	152 or 181	4
AMERICAN CONSTITUTIONS AND INSTITUTIONS*		3
PROGRAM ELECTIVES**		6-7
<b>TOTAL</b>		<b>16-17</b>

**Minimum Credits: 63**

**\*Select from page 81**

**\*\*Choose with an advisor**

