

SCIENCE

Associate of Science—Biological Sciences (Pattern of Study)

Student Learning Outcomes

This program provides graduates with the courses typically required for pre-professional students during their first two years of a bachelor's degree program. This program contains the complete content required for students to achieve acceptable entrance scores on professional school admission tests such as the Medical College Admission Test (MCAT) and other professional school admission tests.

This two-year Associate of Science pattern of study integrates with the Bachelor of Science in Biological Sciences degree listed on page 214. Please consult with an advisor if you plan to enter this bachelor's degree program in order to facilitate timely completion of the four-year degree.

Students will be able to

- Communicate the nature of scientific knowledge and the scientific method and how they were developed.
- Associate biological structure and function.
- Relate molecular genetics and cell and organism function.
- Show how organisms are genetically related, interact on a population level, have evolved, and are evolving.

Attendance in Lab Science Courses

The following science courses have labs and are required to be completed for the AS in Biological Sciences:

BIOL 190, BIOL 191, BIOL 251, CHEM 121, CHEM 122, CHEM 241/241L, and CHEM 242/242L.

Each of these courses have required in-person labs. Depending on the course, the labs may occur weekly, on weekends, or at a time from Monday through Friday any-time from 8 a.m.–6 p.m.

Due to GBC's personnel, equipment, and facilities, courses listed above which have the CHEM prefix have required labs that are only offered on the Elko and Pahrump campuses.

This means that AS in Biological Sciences students will be required to attend lab courses in Elko or Pahrump at least 1–2 days each week and that this is not an online degree. Please consult an advisor for the AS in Biological Sciences for the availability details of each individual science course.

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, ART 107, ENG 205, MUS 101, THTR 100, THTR 105, THTR 204	

Logical and Scientific Reasoning

Mathematical Reasoning—MATH 181 (required)	4
Scientific Reasoning—BIOL 190 (required).....	4
Scientific Data Interpretation—CHEM 121 (required).....	4

Human Societies and Experience

Structure of Societies	3
PSY 101 recommended for pre-medical related students.	
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 (recommended)	

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).....

Foundations	
Mathematics—STAT 152 (required).....	3
(Minimum 5 total credits mathematics)	
Sciences—BIOL 191 (required).....	4

Program Requirements

BIOL	251	General Microbiology	4
CHEM	122	General Chemistry II	4
CHEM	241	Organic Chemistry I	3
CHEM	241L	Organic Chemistry for Life Sciences Lab I	1
CHEM	242	Organic Chemistry II	3
CHEM	242L	Organic Chemistry for Life Sciences Lab II	1

See the following page for suggested course sequence.

Program Electives (choose with advisor) 3
 Recommended electives: sufficient coursework is required to bring the total number of credits in the Associate of Science to 60 credits. Choose courses from the following list: BIOL 223, 224; CHEM 100; CIT 129; ENV 100; GEOG 103; GEOL 101, 102; MATH 127, 128, 182; PHYS 182.

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).

After the AS in Biology, the next step could be the Bachelor of Science in Biological Sciences. See page 214.

Suggested Course Sequence (Refer to page 87) AS—Biological Sciences

FALL—1st Semester		Credits
BIOL	190	4
CHEM	121	4
ENG	100 or 101	3
MATH	181	4
TOTAL		15

SPRING—2nd Semester		Credits
BIOL	191	4
CHEM	122	4
ENG	102	3
FINE ARTS*		3
STAT	152	3
TOTAL		17

FALL—3rd Semester		Credits
CHEM	241	3
CHEM	241L	1
CIS 135 or GIS 109		3
HUMANITIES*		3
ORAL COMMUNICATIONS*		3
AMERICAN CONSTITUTIONS AND INSTITUTIONS*		3
TOTAL		16

SPRING—4th Semester		Credits
CHEM	242	3
CHEM	242L	1
BIOL	251	4
PROGRAM ELECTIVE**		3
STRUCTURE OF SOCIETIES*		3
TOTAL		14

Minimum Credits: 62

*Select from page 81

**Choose with an advisor

