

Assessment: Assessment Plan



Program (SCI) - BS- Biological Sciences

Unit Mission: The mission of the BS in Biological Sciences is to provide a high-quality student-centered bachelors program in the sciences to rural Nevada that 1) relates to the economic need within and outside our region for professionals in the biological sciences, 2) relates to the economic need within and outside our region for rural health and medical professionals through university transfer to medical and other professional programs, and 3) relates to the aspect of the GBC mission on university transfer by providing a biological sciences undergraduate degree for transfer to graduate school in biological sciences and related disciplines.

Outcome: Communicate the nature of scientific knowledge and the scientific method

Communicate the nature of scientific knowledge and the scientific method and how they were developed.

Outcome Status: Active

Assessment Year: 2017-2018, 2019-2020, 2020-2021

Start Date: 01/30/2017

Assessment Measures

Assignment - Project - This will be assessed using a project or paper in the capstone, BIOL 415 - Evolution.
Only students who are declared BIOL-BS will be included. (Active)

Criterion: Average of C or greater on assignment

Notes: Grade on assignment will be provided directly from instructor to program supervisor.

This course is not developed yet so details are not being provided.

Only students who are declared BIOL-BS will be included.

Outcome: Association between biological structure and function

Associate biological structure and function.

Outcome Status: Active

Assessment Year: 2016-2017

Start Date: 09/05/2016

Assessment Measures

Internal Tracking - This will be assessed using the course grades in:

BIOL 410 - Plant Physiology

BIOL 447 - Advanced Comparative Animal Physiology

Only students who are declared BIOL-BS will be included. (Active)

Criterion: C or better grade in course.

Notes: Grades will be collected from official grade rosters or other appropriate official student records.

Justification: 100% of the course content and all graded assessments in these courses is relevant to biological structure and function. There are no formative assessments in these courses.

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Outcome: Relate molecular genetics and cell and organism function

Relate molecular genetics and cell and organism function.

Outcome Status: Active

Assessment Year: 2016-2017

Start Date: 01/25/2016

Assessment Measures

Internal Tracking - This will be assessed using the course grade in BIOL 300 - Principles of Genetics.

Only students who are declared BIOL-BS will be included.

(Active)

Criterion: C or better grade in course.

Notes: Grades will be collected from official grade rosters or other appropriate official student records.

Only students who are declared BIOL-BS will be included.

Justification: 100% of the course content and all graded assessments in this course are relevant to the relationship between molecular genetics and cell and organism function. There are no formative assessments in this course.

Outcome: Communicate the genetic relationships and evolution of organisms.

Communicate the genetic relationships and evolution of organisms.

Outcome Status: Active

Assessment Year: 2017-2018

Start Date: 01/30/2017

Assessment Measures

Internal Tracking - This will be assessed using the course grade in BIOL 415 - Evolution.

Only students who are declared BIOL-BS will be included. (Active)

Criterion: C or better grade in course.

Notes: Grades will be collected from official grade rosters or other appropriate official student records.

Only students who are declared BIOL-BS will be included.

Justification: 100% of the course content and all graded assessments in this course are relevant to how organisms are genetically related, have evolved, and are evolving. There are no formative assessments in this course.

Outcome: Integrate the complexity of the metabolism of cells and organisms.

Integrate the complexity of the metabolism of cells and organisms.

Outcome Status: Active

Assessment Year: 2017-2018

Start Date: 01/23/2017

Assessment Measures

Internal Tracking - This will be assessed using the course grade in BCH 400 - Introductory Biochemistry.

Only students who are declared BIOL-BS will be included. (Active)

Criterion: C or better grade in course.

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Notes: Grades will be collected from official grade rosters or other appropriate official student records.

Only students who are declared BIOL-BS will be included.

Justification: 100% of the course content and all graded assessments in these courses are relevant to the complex interplay of how organisms and populations respond to and interact with each other and their environment. There are no formative assessments in these courses.

Outcome: Analyze the Organisms and populations respond to and interact

Analyze the complex interplay of how organisms and populations respond to and interact with each other and their environment.

Outcome Status: Active

Assessment Year: 2016-2017

Start Date: 07/01/2016

Assessment Measures

Internal Tracking - This will be assessed using the course grades in:

BIOL 341 - Principles of Ecology

BIOL 394 - Laboratory in Ecology and Population Biology (no BIOL-BS students were enrolled in this course this semester)

Only students who are declared BIOL-BS will be included. (Active)

Criterion: C or better grade in course.

Notes: Grades will be collected from official grade rosters or other appropriate official student records.

Only students who are declared BIOL-BS will be included.

Justification: 100% of the course content and all graded assessments in these courses are relevant to the complex interplay of how organisms and populations respond to and interact with each other and their environment. There are no formative assessments in these courses.

Outcome: Communication effectively

Communicate effectively with regards to complex biological concepts, orally and in writing.

Outcome Status: Active

Assessment Year: 2017-2018, 2019-2020, 2020-2021

Start Date: 01/30/2017

Assessment Measures

Assignment - Project - This will be assessed using a project or paper, and an oral presentation in the capstone, BIOL 415 - Evolution.

Only students who are declared BIOL-BS will be included.

(Active)

Criterion: Average of C or greater on assignment.

Notes: Grade on assignment will be provided directly from instructor to program supervisor.

This course is not developed yet so details are not being provided.

Only students who are declared BIOL-BS will be included.

Outcome: Meet professional goals

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Students will be able to meet professional goals. Specifically,

- 8a. fulfill graduate, medical, and other professional school entrance requirements including success on entrance exams.
- 8b. obtain employment needed in the region (federal and state agencies, industry, education) and beyond.
- 8c. obtain employment not linked to this degree or even science from analytical skills in this Bachelor of Science degree.

Outcome Status: Active

Assessment Year: 2020-2021

Start Date: 01/27/2020

Assessment Measures

IRE- Data - Graduate, medical, and other professional school attendance records. These data will come from the National Student Clearinghouse or other centralized data source. (Active)

Criterion: 80% in graduate school or gainfully employed within one year of graduation.

Notes: As this is a general bachelor's degree gainful employment includes employment that, for example, requires a bachelor's degree. Employment in the biological field is not the only type of employment that is considered gainful.

IRE- Data - Gainful employment records. These data will come from GBC-wide Alumni Surveys and/or other centralized data sources such as DETR. (Active)

Criterion: 80% in graduate school or gainfully employed within one year of graduation.

Notes: As this is a general bachelor's degree gainful employment includes employment that, for example, requires a bachelor's degree. Employment in the biological field is not the only type of employment that is considered gainful.