

BIOLOGY BA/BS

The biology major provides a strong foundation through five classes that cover key areas: molecular, cellular, organismal, microbiological, ecological, and evolutionary biology. The program's flexibility allows students to work closely with academic advisers to tailor a course of study that aligns with their strengths and interests. Upper division electives offer a range of options such as immunology, mammalogy, and animal behavior. Students may also enhance their education through undergraduate research projects, teaching assistantships, and internships.

With its broad course offerings, the Biology Program prepares students for diverse career paths including graduate school and admission to professional schools in medicine, dentistry, and other health-related fields. Graduates may also pursue careers in biological research or work with agencies like Idaho Fish and Game. Additionally, students interested in teaching can complete the coursework required for secondary education certification.

The goals of the biology program are to provide students with learning experiences in both the classroom and laboratory so that they can achieve the following:

- Understand cell structure, function, and reproduction;
- Understand the principles of natural selection and evolution;
- Understand organismal form and function;
- Think critically and apply knowledge in novel contexts;
- And perform basic laboratory procedures in a safe manner.

General Education Requirements

Code	Title	Credits
Written Communication		
Select one of the following:		6.00
ENGL-101 & ENGL-102	WRITING AND RHETORIC I and WRITING AND RHETORIC II	
ENGL-109	COLLEGE WRITING AND RESEARCH	
Oral Communication		
Select one from the following:		3.00
COMM-101	FUNDAMENTALS OF ORAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
Mathematical Ways of Knowing		
Select one of the following:		3.00-5.00
MATH-143	PRECALCULUS I: ALGEBRA	
MATH-147	PRECALCULUS	
MATH-170	CALCULUS I	
Humanistic & Artistic Ways of Knowing		
Select two courses from two different categories (Literature, Arts, Language):		6.00-7.00
Literature		
ENGL-175	LITERATURE AND IDEAS	
ENGL-257	WORLD CLASSICS	
ENGL-258	INTERNATIONAL LITERATURE	
ENGL-260	NATIVE AMERICAN LITERATURE	
ENGL-261	MYTHOLOGIES	
Arts		
ART-100	INTRODUCTION TO ART	
HUM-101	THE ART AND HISTORY OF THE MOTION PICTURE	
HUM-150	INTRODUCTION TO THE ARTS	
MUS-101	SURVEY OF MUSIC	
MUS-102	MUSIC IN AMERICA	
MUS-150	WORLD MUSIC	
MUS-151	HISTORY OF MUSICAL THEATER	
MUS-152	HISTORY OF JAZZ AND POPULAR MUSIC STYLES	

THEA-101	SURVEY OF THE THEATER
Language	
NP-101	NEZ PERCE LANGUAGE AND CULTURE
NP-102	NEZ PERCE LANGUAGE AND HISTORY
SPAN-101	ELEMENTARY SPANISH I
SPAN-102	ELEMENTARY SPANISH II
Scientific Ways of Knowing	
Select two of the following:	
CHEM-111	PRINCIPLES OF CHEMISTRY I
PHYS-111	GENERAL PHYSICS I
or PHYS-211	PHYSICS FOR SCIENTISTS AND ENGINEERS I
Social & Behavioral Ways of Knowing	
Select one course from two disciplines:	
ANTH-102	CULTURAL ANTHROPOLOGY
ANTH-120	WORLD PREHISTORY
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES
ECON-201	PRINCIPLES OF MACROECONOMICS
ECON-202	PRINCIPLES OF MICROECONOMICS
GEOG-102	INTRODUCTION TO GEOGRAPHY
HIST-101	WORLD HISTORY I
HIST-102	WORLD HISTORY II
HIST-111	UNITED STATES HISTORY I
HIST-112	UNITED STATES HISTORY II
HRPT-184	DIVERSITY IN ORGANIZATIONS
HRPT-185	HUMAN RELATIONS IN ORGANIZATIONS
POLS-101	AMERICAN NATIONAL GOVERNMENT
POLS-237	INTERNATIONAL POLITICS
POLS-285	COMPARATIVE GOVERNMENT
PSYC-101	INTRODUCTION TO GENERAL PSYCHOLOGY
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY
SOC-101	INTRODUCTION TO SOCIOLOGY
SOC-102	SOCIAL PROBLEMS
SS-184	DIVERSITY IN ORGANIZATIONS
SS-185	HUMAN RELATIONS IN ORGANIZATIONS
Global Perspectives	
Select one of the following:	
ANTH-102	CULTURAL ANTHROPOLOGY
ANTH-120	WORLD PREHISTORY
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES
ANTH-360	RACE AND ETHNICITY
COMM-345	INTERCULTURAL COMMUNICATION
ENGL-258	INTERNATIONAL LITERATURE
ENGL-474	NATIVE AMERICAN WRITTEN LITERATURE
GEOG-102	INTRODUCTION TO GEOGRAPHY
HIST-101	WORLD HISTORY I
HIST-102	WORLD HISTORY II
HIST-111	UNITED STATES HISTORY I
HIST-112	UNITED STATES HISTORY II
HRPT-184	DIVERSITY IN ORGANIZATIONS
ID-300C	ETHICS AND IDENTITY
KIN-220	SOCIAL-CULTURAL ASPECTS OF SPORTS
NP-101	NEZ PERCE LANGUAGE AND CULTURE

NP-102	NEZ PERCE LANGUAGE AND HISTORY
POLS-285	COMPARATIVE GOVERNMENT
SOC-101	INTRODUCTION TO SOCIOLOGY
SPAN-101	ELEMENTARY SPANISH I
SPAN-102	ELEMENTARY SPANISH II
SPAN-201	INTERMEDIATE SPANISH I
SPAN-202	INTERMEDIATE SPANISH II
Integrative Seminar: Ethics & Values	
Select one of the following:	
ID 300A - 300Z (see course descriptions for options)	
ID-301A	HELLS CANYON INSTITUTE
Total Credits	
38.00-42.00	

Program Requirements

Code	Title	Credits
Major Courses		
BIOL-181	ORGANISMAL BIOLOGY	4.00
BIOL-182	CELLULAR BIOLOGY	4.00
BIOL-331	ECOLOGY	3.00
BIOL-341	GENETICS	4.00
BIOL-355	GENERAL MICROBIOLOGY	4.00
or BIOL-362	CELLULAR AND MOLECULAR BIOLOGY	
BIOL-372	COMPUTATIONAL BIOSTATISTICS	4.00
BIOL-460	EVOLUTION	4.00
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
CHEM-371 & CHEM-373	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4.00
CHEM-481	BIOCHEMISTRY I	4.00
MATH-170	CALCULUS I (Required if not completed as core)	
PHYS-112	GENERAL PHYSICS II	4.00
Program Electives		
Select 7 credits from any BIOL/CHEM/GIS/BIOF course numbered 200 or higher		7.00
Select 4 credits from BIOL/CHEM/GIS course numbered 300 or higher		4.00
Select 4 credits from BIOL/CHEM numbered 300 or higher		4.00
Select 8 credits of BIOL numbered 300 or higher		8.00
Electives		
Select 16 elective credits		16.00
Total Credits		82.00

¹ 8 or less credits of CHEM/GIS and 3 or less credits total from courses ending in -94, -95, or -99.

² 3 or less credits total from BIOL-485.

³ BIOL-280 and BIOL-480 cannot be used as Biology electives.

Sequential Plan of Study

Course	Title	Credits
First Year		
Fall		
BIOL-181	ORGANISMAL BIOLOGY	4.00
CHEM-111	PRINCIPLES OF CHEMISTRY I	4.00
ENGL-101	WRITING AND RHETORIC I	3.00
CORE	MATH-143, MATH-147 or MATH-170	3.00-5.00
Credits		14.00-16.00

Spring

BIOL-182	CELLULAR BIOLOGY	4.00
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
CORE	Oral Communication	3.00
ENGL-102	WRITING AND RHETORIC II	3.00
Credits		14.00

Second Year**Fall**

CHEM-371	ORGANIC CHEMISTRY I	3.00
CHEM-373	ORGANIC CHEMISTRY I LAB	1.00
CORE	Humanistic & Artistic Ways of Knowing	3.00
Elective	Elective Credits	3.00
Program Requirement	Select BIOL, CHEM, GIS course in 200/300/400 level	4.00
Credits		14.00

Spring

BIOL-372	COMPUTATIONAL BIOSTATISTICS	4.00
CORE	Humanistic & Artistic Ways of Knowing	3.00
Program Requirement	Select BIOL, CHEM, GIS course in 200/300/400 level	3.00
Elective	Elective Credits	4.00
Credits		14.00

Third Year**Fall**

BIOL-341	GENETICS	4.00
BIOL-355 or BIOL-362	GENERAL MICROBIOLOGY or CELLULAR AND MOLECULAR BIOLOGY	4.00
PHYS-111 or PHYS-211	GENERAL PHYSICS I or PHYSICS FOR SCIENTISTS AND ENGINEERS I	4.00
CORE	Social & Behavioral Ways of Knowing	3.00
Credits		15.00

Spring

BIOL-331	ECOLOGY	3.00
CORE	Social & Behavioral Ways of Knowing	3.00
PHYS-112	GENERAL PHYSICS II	4.00
Program Requirement	Select BIOL or CHEM course in 300/400 level	4.00
Elective	Elective Credits	2.00
Credits		16.00

Fourth Year**Fall**

CHEM-481	BIOCHEMISTRY I	4.00
CORE	Integrative Seminar: Ethics & Values	3.00
Program Requirement	Select BIOL course in 300/400 level	4.00
Program Requirement	Select BIOL, CHEM, GIS course in 300/400 level	4.00
Credits		15.00

Spring

BIOL-460	EVOLUTION	4.00
CORE	Global Perspectives	3.00
Program Requirement	Select BIOL course in 300/400 level	4.00
Elective	Elective Credits	3.00
Elective	Elective Credits	4.00
Credits		18.00

Total Credits**120.00-122.00**

Graduates with a BA/BS in Biology go on to obtain careers in a variety of fields:

- Biotechnology
- Botany
- Bioinformatics
- Biomedical
- Ecology
- Microbiology
- Genetics
- Healthcare
- Legislation/Law
- Zoology, Marine, Aquatic Biology
- Technical and Pharmaceutical Sales