

LIFE SCIENCE OPTION

This option is available within the Data Science (<https://catalog.oregonstate.edu/college-departments/science/statistics/data-science-bs-hbs/>) major at the following location:

- **Corvallis**

The Life Science option prepares data science students to address biological, ecological, or health-related challenges using data science techniques. This option provides students with a strong foundation in key life science areas. By integrating these foundational concepts with data analysis skills, students gain the tools needed to analyze complex biological systems, interpret ecological patterns, and contribute to advancements in health and environmental sciences.

Option Code: A055

Upon successful completion of the program, students will meet the following learning outcomes:

- Explain and apply the fundamental concepts of the biological sciences.

Code	Title	Credits
Required Core		
BI 221Z	+*PRINCIPLES OF BIOLOGY: CELLS	15
& BI 222Z	and *PRINCIPLES OF BIOLOGY: ORGANISMS	
& BI 223Z	and *PRINCIPLES OF BIOLOGY: ECOLOGY AND EVOLUTION	
CH 121	+GENERAL CHEMISTRY	5
or CH 221Z	GENERAL CHEMISTRY I	
& CH 227Z	and +*GENERAL CHEMISTRY I LABORATORY	
Electives		
Select one course from the following: ¹		3-4
BB 314	CELL AND MOLECULAR BIOLOGY	
BI 311	GENETICS	
BI 370	ECOLOGY	
Select one course from the following: ¹		3-4
BDS 474	INTRODUCTION TO GENOME BIOLOGY	
BDS 475	COMPARATIVE GENOMICS	
BDS 477	POPULATION GENOMICS	
BDS 491	CAPSTONE PROJECTS IN BIOLOGICAL DATA SCIENCE I	
Select additional electives from BI, BB, BDS, FW, and Z with advisor approval ²		7-9
Total Credits		33-37

*

Baccalaureate Core course. Applies to general education requirements for undergraduate students in a catalog year up to 2024-2025

+

Core Education course. Applies to general education requirements for undergraduate students in catalog year 2025-2026 and beyond

1

Courses not used may count as additional electives

2

A minimum of 15 upper-division credits are required in the option. All electives must be upper-division to equal a minimum of 15 credits.

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