# BS BIOLOGY -

# MARINE EMPHASIS



A juvenile california sea lion (*Zalophus californianus*) off the coast of Baja Sur, Mexico. Taken during the summer tropical marine research course (BIOL 437) in La Paz, Mexico.

Image provided by Dr. Ben Miner.

In the heart of the Salish Sea, Western is in an ideal location for undergraduates studying marine sciences. The Biology – Marine Emphasis major provides a thorough introduction to the basic areas of biology and supporting sciences while allowing specialization in marine biology. Students explore the structure and function of marine organisms and their relationship with the environment. A highlight for most students in this emphasis is the opportunity to enroll in courses taught at Western's Shannon Point Marine Center

located in Anacortes, WA (about an hour from Bellingham). These all-day courses give students the opportunity to delve deeply into marine ecology and algal diversity, and include boatbased research and trips to nearby islands.

HOT TOPICS

How is climate change impacting marine organisms and their environment?

What are the potential causes and ecological consequences of sea star wasting disease?

To learn more about this major, visit the university catalog –

catalog.wwu.edu

For a complete overview of course requirements for this program, access Degree Works via Web4u

Join the conversation: facebook.com/groups/wwubiology



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To request this document in an alternate format, please contact biologyadvising@wwu.edu.

## STUDENT SPOTLIGHT

"The biology department has fostered many of my deep relationships with both peers and professors as an undergrad. I have gotten to work in tight-knit groups both in labs on campus, as well as in the field at the Shannon Point Marine Center and abroad."

- Laura Anthony, NOAA Hollings Scholarship Recipient



# SAMPLE CAREER PATHWAYS

Marine Scientist

Fisheries Biologist

**Ecologist** 

Conservation Biologist

Naturalist

Laboratory Technician



Alejandro Acevedo-Gutiérrez

Shawn Arellano

Deborah Donovan

Robin Kodner

Benjamin Miner

Craig Moyer

**Brady Olson** 



BIOL 407

Marine Ecology

BIOL 464

Marine Mammals

BIOL 403

**Ecological Physiology** 

BIOL 460

Intertebrate Biology

BIOL 456

Algae

BIOL 437A & 437B Tropical Marine Research

## SAMPLE FIRST YEAR SCHEDULE

ALEKS Score:	FALL	WINTER	SPRING
Prior completion of Calc. 1	BIOL 204 CHEM 161 3-5 cr. non-science GURs	BIOL 205 CHEM 162 3-5 cr. non-science GURs	BIOL 206 CHEM 163 3-5 cr. non-science GURs
80	MATH 124 CHEM 161 3-5 cr. non-science GURs	BIOL 204 CHEM 162 3-5 cr. non-science GURs	BIOL 205 CHEM 163 3-5 cr. non-science GURs
70	MATH 118 CHEM 161 3-5 cr. non-science GURs	MATH 124 CHEM 162 3-5 cr. non-science GURs	BIOL 204 CHEM 163 3-5 cr. non-science GURs
55	MATH 114 7-10 cr. non-science GURs	MATH 115 CHEM 161 3-5 cr. non-science GURs	MATH 124 CHEM 162 3-5 cr. non-science GURs
35	MATH 112 7-10 credits of non- science GURs	MATH 114 7-10 credits of non- science GURs	MATH 115 CHEM 161 3-5 cr. non-science GURs

#### **COURSE LOAD**

Due to the heavy workload associated with lab-based courses, students are advised to take no more than two science courses per quarter (including math) during their first year. Course load will increase as students move through their program requirements.

## APPLYING TO THE BIOLOGY MAJOR

To become a Biology Major and take upper-division Biology courses, students must complete the Biology Major Application. The application covers three areas:

- Responses to the four essay prompts
- A Knowledge Assessment score
- A cumulative grade-point average (GPA) for BIOL 204, BIOL 205, CHEM 161, and CHEM 162 (or the equivalent courses)

Students who have applied to be a Biology pre-major will be able to access the application via Canvas. The application deadline is the first Friday of the quarter prior to the quarter you plan to start your major. To be eligible to apply, students must have completed BIOL 204, BIOL 205, CHEM 161, and CHEM 162 (or equivalent courses) with a C- or greater.

### COURSE PLANNING WORKSHEET

	FALL	WINTER	SPRING	SUMMER
Year 1				
Year 2				
Year 3				
Year 4				