

# Weber State University – ZOOLOGY MAJOR – *Marine Biology*

Bachelor of Science Degree (BS) 2023-Current

**Required Zoology Courses:**

ZOOL 1110	LS Principles of Zoology	(4)	_____
ZOOL 2220	Diversity of Animals	(4)	_____
ZOOL 3200	Cell Biology	(4)	_____
ZOOL 3300	Genetics	(4)	_____
ZOOL 3450	Ecology	(4)	_____
ZOOL 3600	Comparative Physiology	(4)	_____
ZOOL 3720	Evolution	(3)	_____
ZOOL 4990	Seminar	(1)	_____
<b>Total Credit Hours</b>			<b>28</b>

**Upper-division Zoology Electives (minimum 4 courses):**

ZOOL 3470	Zoogeography	(3)	_____
ZOOL 3500	Conservation Biology	(3)	_____
ZOOL 3730	Population Biology	(3)	_____
ZOOL 3820	Biology of Cancer	(3)	_____
ZOOL 4050	Comparative Vertebrate Anatomy	(4)	_____
ZOOL 4100	Vertebrate Embryology	(4)	_____
ZOOL 4120	Histology	(4)	_____
ZOOL 4210	Advanced Human Physiology	(4)	_____
ZOOL 4220	Endocrinology	(4)	_____
ZOOL 4300	Research Applications in Genetics	(4)	_____
ZOOL 4350	Animal Behavior	(4)	_____
ZOOL 4470	Wildlife Ecology and Management	(4)	_____
ZOOL 4480	Aquatic Ecology	(4)	_____
ZOOL 4490	Marine Ecology §	(4)	_____
ZOOL 4500	Parasitology	(4)	_____
ZOOL 4640	Entomology	(4)	_____
ZOOL 4650	Ichthyology	(4)	_____
ZOOL 4660	Herpetology	(4)	_____
ZOOL 4670	Ornithology	(4)	_____
ZOOL 4680	Mammalogy	(4)	_____
ZOOL 4700	Topics in Zoology^	(3-4)	_____
<b>Total credit hours</b>			<b>12-16</b>

**Experience in Zoology (minimum 2 credit hours – may be taken in the same or separate semesters - or select a 5<sup>th</sup> course from upper-division electives above):**

ZOOL 3099	Teaching the Human Anat. Lab.	(3)	_____
ZOOL 3100	Advanced Human Anatomy	(3)	_____
ZOOL 4800	Problems in Zoology	(1-4)	_____
ZOOL 4820	Human Physiol. Lab. Teach. Assist.	(1)	_____
ZOOL 4830	Readings in Zoology	(1-4)	_____
ZOOL 4890	Cooperative Work Experience	(1-4)	_____
ZOOL 4920	Short Courses	(1-4)	_____
ZOOL 4950	Field Zoology	(1-3)	_____
ZOOL 4970	Thesis	(2)	_____
ZOOL 4980	Research Design	(2)	_____
<b>Total credit hours</b>			<b>2</b>

**Required Chemistry Courses:**

CHEM 1210	PS Principles of Chemistry I	(4)	_____
CHEM 1215	Principles of Chemistry I Lab	(1)	_____
CHEM 1220	Principles of Chemistry II	(4)	_____
CHEM 1225	Principles of Chemistry II Lab	(1)	_____
<b>Total credit hours</b>			<b>10</b>

**Required Math Courses (minimum 1 course):**

MATH 1050	QL College Algebra	(4)	_____
MATH 1060	Trigonometry	(3)	_____
MATH 1080	QL Pre-calculus	(5)	_____
MATH 1210	Calculus I	(4)	_____
<b>Total credit hours</b>			<b>3-5</b>

**Required Statistics Courses (minimum 1 course):**

MATH 1160	(1040) QL Introduction to Statistics	(3)	_____
MATH 3410	Probability and Statistics I	(3)	_____
SOC 3600	Social Statistics	(3)	_____
PSY 3600	Statistics in Psychology	(3)	_____
<b>Total Credit Hours</b>			<b>3</b>

**Required Physics Courses (minimum 1 course):**

PHYS 1010	PS Elementary Physics	(3)	_____
PHYS 2010	PS College Physics I w/lab	(5)	_____
PHYS 2210	PS Physics for Sci. and Eng. I w/lab	(5)	_____
<b>Total Credit Hours</b>			<b>3-5</b>

**Elective Support Courses (minimum 4 courses, must include at least 1 BTNY or MICR; Courses taken with separate labs counts as 1 course):**

**Botany**

BTNY 1203	LS Plant Biology	(3)	_____
BTNY 2104	Plant Form and Function*	(4)	_____
BTNY 2114	Evolutionary Survey of Plants*	(4)	_____
BTNY 2303	Ethnobotany	(3)	_____
BTNY 3105	Anatomy of Vascular Plants	(4)	_____
BTNY 3204	Plant Physiology	(4)	_____
BTNY 3214	Soils	(4)	_____
BTNY 3454	Plant Ecology	(4)	_____
BTNY 3504	Mycology	(4)	_____
BTNY 3624	Taxonomy of Vascular Plants	(4)	_____

**Chemistry**

CHEM 2310	Organic Chemistry I	(4)	_____
	with CHEM 2315 Organic Chemistry I Lab	(1)	_____
CHEM 2320	Organic Chemistry II	(4)	_____
	with CHEM 2325 Organic Chemistry II Lab	(1)	_____
CHEM 3070	Biochemistry I	(3)	_____

**Earth and Environmental Sciences**

GEO 3710	Intro to Geographic Information Systems^	(4)	_____
GEO 3840	Remote Sensing: Principles and Methods^	(4)	_____

**Math**

MATH 3450	Advanced Statistical Methods^	(4)	_____
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**Microbiology**

MICR 2054	LS Principles of Microbiology	(4)	_____
MICR 3053	Microbiological Procedures	(3)	_____
MICR 3203	Immune System in Health & Disease	(3)	_____
MICR 3254	Immunology	(4)	_____
MICR 3305	Medical Microbiology	(5)	_____
MICR 3484	Environmental Microbiology	(4)	_____
MICR 3853	Food Microbiology	(3)	_____
MICR 4054	Microbial Physiology	(4)	_____
MICR 4554	Virology	(4)	_____

**Neuroscience**

NEUR 2050	Introduction to Neuroscience^	(3)	_____
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**Physics**

PHYS 2020	College Physics II w/lab	(5)	_____
PHYS 2220	Physics for Sci. and Eng. II w/lab	(5)	_____

**Zoology**

ZOOL 2100	Human Anatomy	(4)	_____
ZOOL 2200	LS Human Physiology	(4)	_____
<b>Total credit hours</b>			<b>12-20</b>

*Note:*

*\*Pre-Requisites for most upper-division Botany courses*

*^Class may not show in CatTracks; please see Department Chair.*

**Courses with a § are strongly recommended**

Please check the Catalog and CatTracks for Pre-Requisites & Co-Requisites

Please meet with a **Zoology** advisor (Dr. Brasso) for course planning.

*Worksheet is for Zoology major coursework and does not include minor or university coursework.*

*40 credit hours must be 3000 level or higher (upper division) for the Bachelor of Science degree.*