

# Weber State University – ZOOLOGY MAJOR – *Pre-Professional* (*Pre-Med, Pre-Vet, Pre-Dent*)

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 <sup>^</sup>	(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:**

CHEM1210 PS Principles of Chemistry I	(4)	_____
CHEM1215 Principles of Chemistry I Lab	(1)	_____
CHEM1220 Principles of Chemistry II	(4)	_____
CHEM1225 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):**

<b>Botany</b>		
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 <sup>^</sup>	(4)	_____
GEO 3840 Remote Sensing: Principles and Methods <sup>^</sup>	(4)	_____

**Math**

MATH 3450 Advanced Statistical Methods <sup>^</sup>	(4)	_____
---	-----	-------

**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 <sup>^</sup>	(3)	_____
---	-----	-------

**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*

*<sup>^</sup>Class may not show in CatTracks; please see Department Chair.*

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

Please meet with a **Pre-Professional** advisor (Dr. James Moore) for course planning. Admission requirements may vary.

*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.*