

Weber State University – ZOOLOGY MAJOR – *Ecosystems 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)	_____
Total Credit Hours		28

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)	_____
Total credit hours		12-16

Experience in Zoology (minimum 2 credit hours – may be taken in the same or separate semesters - or select a 5th 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)	_____
Total credit hours		2

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)	_____
Total credit hours		10

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)	_____
Total credit hours		3-5

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)	_____
Total Credit Hours		3

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)	_____
Total Credit Hours		3-5

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 1110 PS Dynamic Earth: Physical Geology^	(3)	_____
with GEO 1115 Physical Geology Lab^	(1)	_____
GEO 1220 Historical Geology^	(4)	_____
GEO 3150 Geomorphology^	(4)	_____
GEO 3710 Intro to Geographic Information Systems^	(4)	_____
GEO 3840 Remote Sensing: Principles & 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)	_____

Total credit hours **12-20**

Note:

*Pre-Requisites for most upper-division Botany courses

^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 **Zoology** advisor (Dr. Hoagstrom) 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.