

PROFESSIONAL SCIENCE MASTER'S IN NATURAL SCIENCES – ZOO, AQUARIUM, AND ANIMAL SHELTER MANAGEMENT SPECIALIZATION

The Professional Science Master's (PSM) in Natural Sciences – Zoo, Aquarium, and Animal Shelter Management Specialization is a unique opportunity to blend business skills and applied science with a specific focus on helping animal organizations. Our two-year Professional Science Master's degree program focuses on experiential learning and development of skills in addition to academic learning.

The PSM in Natural Sciences, Zoo, Aquarium, and Animal Shelter Management Specialization is an affiliated Professional Science Master's (PSM) degree. Affiliation is administered by the Commission on Affiliation of PSM Programs (<https://www.professionalsciencemasters.org/>) (formerly named PSM National Office) to ensure a strong and distinctive PSM brand. The PSM is designed for students who are seeking a graduate degree in science or mathematics and understand the need for developing workplace skills valued by top employers.



Requirements Effective Fall 2023

Code	Title	Credits
NSCI 579/VS 579	Applied Animal Behavior	4
NSCI 601	PSM Ethics for Animal Professionals	1
NSCI 611	Leadership in Animal Organizations	3
NSCI 621	Workplace Wellness - Animal Organizations	3
NSCI 631	Non-Profit Marketing and Community Relations	3
NSCI 641	Fiscal Management for Animal Welfare Leaders	2
NSCI 651	Non-Profit Fund Development and Grant Writing	3
NSCI 688A	PSM Capstone: Preparation	2

NSCI 688B	PSM Capstone: Proposal Writing	2
NSCI 688C	PSM Capstone: Project	1
NSCI 688D	PSM Capstone: Support for Deliverable and Job Search	2
NSCI 688E	PSM Capstone: Completion	3
NSCI 693A	Graduate Seminar: Zoo, Aquarium, and Animal Shelter Management	4
Select one course from the following:		2-3
ANEQ 322	Pet Nutrition	
ANEQ 323	Zoo Nutrition	
ANEQ 522	Animal Metabolism	
Professional skills electives (select from the list below with approval of advisor)		8-9

Program Total Credits: 43-45

A minimum of 43 credits are required to complete this program.

Professional Skills Electives

Code	Title	Credits
Aquarium		
BZ 415	Marine Biology	4
BZ 515	Physiological Ecology of Marine Vertebrates	3
FW 300	Biology and Diversity of Fishes	2
FW 405	Fish Physiology	3
FW 540	Fisheries Ecology	3
Behavior		
ANEQ 315	Equine Behavior	2
ANTH 370	Primates	3
ANTH 375	Evolution of Primate Behavior	3
BMS 325	Cellular Neurobiology	3
BMS 505/NB 505	Neuronal Circuits, Systems and Behavior	3
BZ 430	Animal Behavior and Conservation	3
BZ 433	Behavioral Genetics	3
BZ 479/VS 479	Biology and Behavior of Dogs	3
BZ 505	Cognitive Ecology	3
BZ 535	Behavioral and Cognitive Ecology	3
PSY 600E	Advanced Psychology: Animal Learning	3
Breeding/Reproduction		
ANEQ 310	Animal Reproduction	3
ANEQ 312	Animal Ultrasonography	2
ANEQ 328	Foundations in Animal Genetics	3
ANEQ 330	Principles of Animal Breeding	3
ANEQ 334	Principles of Equine Genetics	3
BMS 521	Comparative Reproductive Physiology	3
BMS 640	Reproductive Physiology and Endocrinology	4
BMS 642	Research Techniques for Gametes and Embryos	1
Comparative Physiology/Taxonomy		
BZ 329A	Herpetology: Lecture	3
BZ 330A	Mammalogy: Lecture	3
BZ 335	Ornithology	3
BZ 401	Comparative Animal Physiology	3

FW 300	Biology and Diversity of Fishes	2
Companion Animal		
ANEQ 322	Pet Nutrition	2
BZ 479/VS 479	Biology and Behavior of Dogs	3
SOWK 550	Animal Assisted Therapy and Human-Animal Bond	3
Education and Human Dimensions		
EDRM 707	Quantitative Data Collection Methods/Analysis	3
EDRM 708	Narrative Inquiry	3
EDRM 711	Ethnographic Research	3
NRRT 505	Environmental Education History and Theory	3
NRRT 506	Methods in Environmental Education Research	3
NRRT 507	Environmental Education Planning	3
NRRT 508	Current Issues in Environmental Education	3
Habitat Design		
HORT 331	Landscape Design	2
LAND 365	Landscape Contract Drawing and Specifications	3
LAND 366	Landscape Design Expression	4
Nutrition		
ANEQ 322	Pet Nutrition	2
ANEQ 323	Zoo Nutrition	2
ANEQ 345	Principles of Nutrition: Equine Applications	3
ANEQ 720	Nutritional Energetics	3
ANEQ 725	Rumen Metabolism	3
NR 367	Concepts in Vertebrate Nutrition	3
Management		
BUS 500	Foundations for Business Impact	2
BUS 614	Accounting Concepts	2
BUS 615	Managerial Accounting	2
FIN 305	Fundamentals of Finance	3
MKT 370	Digital Marketing	3
NR 401	Techniques in Public Relations	2
NR 501	Leadership and Public Communications	3
NR 535	Action for Sustainable Behavior	3
NR 555	Preparation of Grant Proposals	2
NRRT 460	Tourism Event and Conference Planning	3
NRRT 471	Starting and Managing Tourism Enterprise	3