

Zoo Sciences and Applied Conservation Biology

General Studies:

Composition & Oral Communication Outcome (6-10 credit hours)

2-3 courses, grade of C or better required

ENG 101 and ENG 102	—, —	COM 101	—
OR		(required for all students)	
ENG 103	—		

Analysis Outcome (3 credit hours; 7-11 credit hours of MATH and BIO/CHEM/PHYS satisfied within major requirements)

Students must take one course:

COM 203 (Arg/Debate)	—	LING 150 (Intro Ling)	—
ECON 103 (Microecon)	—	PHIL 210 (Logic)	—
FIN 131 (Financial Lit)	—	PSYC 101 (Intro to Psych)	—

Cultural Literacy Outcome (18 credit hours)

Students must take courses from each literacy block as directed:

History (1 Course)

HIST 103, 104, 210, 211 —

Literature (1 Course)

ENG 202, 204, 205, 214, 215 —

Arts & Humanities (2 Courses)

1 course from each group

GROUP I:

ART 140, 341, 343,

MUS 130, 132, 133, 134

THE 100, 300 —

GROUP II:

PHIL 201, 205

REL 250, 335

Any FREN or SPAN

SPA 252 —

Social Sciences (2 Courses)

2 courses from different groups

GROUP I:

GEO 205, 206 —

GROUP II:

POLS 101, 201, 202 —

GROUP III:

SOC 150, SWK 201 —

Students are admitted to Zoo Sciences and Applied Conservation based on a separate application. Students must maintain a cumulative GPA of 2.5 in science and math and complete a minimum of 50 hours/semester of animal husbandry with the WLU Zoo Sciences animal collection for a minimum total of 200 hours by the end of the fourth semester of study. Please see the WLU catalog for more details.

Core Courses: (25-27 hours)

BIO 124/125 ^t (Prin Bio; F/S)	—/—	BIO 221 (Biostats)	—/—
--	-----	--------------------	-----

Approved 11/2015; effective Fall 2016; revised 2/26/2016; updated 12/19/2016; revised 4/11/2017; revised April/2019; revised 1/14/2020; revised 3/9/2021; revised 4/2021; approved 6/2022

BIO 200 (Botany & lab; F/S)	__	MATH 160 [†] (Stats)	__
BIO 202/203 (Zoo/lab; F/S)	__/_	CHEM100/101 [†] (Foundations)	__/_
BIO 207 (Funds Eco&Biodiv)	__	OR	
		CHEM 110/111 ^λ (Gen Chem 1)	__/_

[†]Courses fulfill General Studies Analysis Outcome for Quantitative and Scientific blocks.

^λCHEM 110/111 is recommended for the Marine & Aquarium Track

Required Courses (36 hours):

BIO 180 (Prin. Zoo/Aquar Sci)	__ (3h) ¹	BIO 404/405 (Ecology/lab)	__ (4h)
BIO 181 (Zoo Sci training)	__ (0h)*	BIO 406 (Field Biology/lab)	__ (4h)
BIO 280 (Zoo Education)	__ (3h) ¹	BIO 440 (Conserv Bio/lab)	__ (4h)
BIO 380 (Zoo Ornithology/lab)	__ (4h) ¹	BIO 450 (Zoo An Behav/lab)	__ (4h) ¹
BIO 382 (Zoo Herp/lab)	__ (4h) ¹	BIO 480 (Bio Capstone)	__ (2h)
BIO 384 (Zoo Mamma/lab)	__ (4h) ¹		

*all students in the Zoo Sciences and Applied Conservation major must take a mandatory husbandry training course while they are conducting the 200 volunteer hours.

Zoo Sciences Track (14h)

BIO 426 (Comp An Phys/lab)	__ (4h)
BIO 452 (Zoo Anim Med/lab)	__ (4h) ¹
BIO 454 (Internship)	__ (6h) ¹ – two 3-credit internships

Applied Conservation Track (13h)

BIO 386 (Applied Con/lab)	__ (4h) ¹
BIO 428 (Evolutionary Bio)	__ (3h)
BIO 471 (Con Practicum)	__ (6h) ¹ – this practicum is two 3-credit courses

Marine & Aquarium Science Track (16h)

BIO 288 Aquarium Science	__ (4h) ¹	
BIO 371 Marine Biology	__ (3h)	
BIO 454 (Internship)	__ (6h) ¹ - two 3-credit internships	
PHYS 400 Oceanography	__ (3h)	107 total hours (37 Gen Ed/70 Program)

¹These courses (9) will have a Zoo Sciences and Applied Conservation course fee.

General Electives: General electives to total 120h (approximately 13-18 credit hours; 120h required for graduation).

Courses are not offered every semester/year; please consult with the Biology advisor.

Approved 11/2015; effective Fall 2016; revised 2/26/2016; updated 12/19/2016; revised 4/11/2017; revised April/2019; revised 1/14/2020; revised 3/9/2021; revised 4/2021; approved 6/2022

A cumulative GPA of 2.50 is required for all math and science courses, with a grade no lower than "C" in these courses.

Other Requirements:

A ten-week summer internship between the sophomore and junior year of study at an AZA-accredited zoo is required.

Students must volunteer with the Zoo Science animal collection and applied conservation labs for a minimum of 50 hours per semester for a total of 200 hours during the freshman and sophomore years of study as a prerequisite for experience.

During the junior and senior years of study, students focusing on animal husbandry must complete two semesters (springs and/or falls) interning at an AZA-accredited facility; suggested semester schedules: 9-12 credit hours of coursework plus 3 credit hours of internship credit for the Zoo experience. Students in the Applied Conservation track must complete two conservation practicums with either applied conservation faculty at WLU or with approved conservation specialists in the field.