## THE UNIVERSITY OF RHODE ISLAND

Wildlife and Conservation Biology	
EL_WCB_BS	
120 Credits Total	
wah uri adu/nrc/	

Student:	
Student ID:	
Advisor:	

<u>General Education Guidelines:</u> General education is 40 credits. Each of the twelve outcomes (A1-D1) must be met by at least 3 credits. A single course may meet more than one outcome, but cannot be double counted towards the 40 credit total. At least one course must be a Grand Challenge (G). No more than twelve credits can have the same course code (note- HPR courses may have more than 12 credits). General education courses may also be used to meet requirements of the major or minor when appropriate.

#### LIST COURSES THAT MEET GENERAL EDUCATION:

	Gener	ral Educ	atio	n Credit Cou	ınt	
A				nore than 12 course code	credits	
Course	Credit	Grade		Course	Credit	Grade
*NRS100	3					
*BIO101	3					
*BIO103	1					
*BIO102	3					
*BIO104	1					
*CHM103	3					
*MTH131	3					
*EEC105	3					
				Total Gen		
				Ed Credits		

NOTE: BECAUSE MOST COURSES MEET MORE THAN ONE OUTCOME, YOUR OUTCOME AUDIT MIGHT BE COMPLETED BEFORE YOU REACH YOUR 40 CREDITS. HOWEVER, YOU MUST STILL COMPLETE 40 CREDITS OF GENERAL EDUCATION

#### LIST COURSE AS EACH OUTCOME IS MET:

General Education Outco	ome Audit
	Course
KNOWLEDGE	
A1. STEM	*NRS100
A2. Social & Behavioral Sciences	*EEC105
A3. Humanities	
A4. Arts & Design	
COMPETENCIES	
<b>B1.</b> Write effectively	
<b>B2.</b> Communicate effectively	
B3. Mathematical, statistical, or	*MTH131
computational strategies	*WI1H131
<b>B4.</b> Information literacy	
RESPONSIBILITIES	
C1. Civic knowledge &	
responsibilities	
C2. Global responsibilities	
C3. Diversity & Inclusion	
INTEGRATE & APPLY	
<b>D1.</b> Ability to synthesize	
GRAND CHALLENGE	
<b>G.</b> At least one course of your 40	
credits is an approved "G" course	
(NRS330G recommended - A1, C2, G)	

<b>Transfer out of University College for Academic Success Requirement:</b> Must have completed at least 30 credits with a minimum
cumulative 2.0 GPA, as well as a grade of C or better in BIO 101/103, 102/104, and NRS 100.

Advising Notes:		

<sup>\*</sup>course fulfills general education and a major requirement

## THE UNIVERSITY OF RHODE ISLAND

Wildlife & Conservation Biology	Student:	
EL_WCB_BS	Student ID:	
120 Earned Credits Total	Advisor:	

## **ABOUT THE BS in WILDLIFE & CONSERVATION BIOLOGY:**

Students enrolled in the Wildlife & Conservation Biology major study a combination of the natural sciences and principles of managing wildlife populations and their habitats. This major is one of very few in the United States that fulfills the educational requirements for certification as an Associate Wildlife Biologist by The Wildlife Society, the international organization for professionals in the wildlife field. It also provides an excellent foundation for graduate school. The URI Student Chapter of The Wildlife Society is heavily involved with career-related activities. web.uri.edu/nrs/wildlife-and-conservation-biology/.

#### REVIEW YOUR PROGRAM REQUIREMENTS

Intro to URI &	NRS (2 credit	cs)	
Course	Semester	Credits	Grade
URI 101		1	
NRS 101		1	

Intro. Professio	onal Courses (1	19 credits)	
Course	Semester	Credits	Grade
BIO 262		4	
*EEC 105		3	
*NRS 100		3	
NRS 200		1	
NRS 212		4	
NRS 223		4	

<b>Basic Sciences (</b>	(22-23 credits)		
Course	Semester	Credits	Grade
*BIO 101		3	
*BIO 103		1	
*BIO 102		3	
*BIO 104		1	
*CHM 103		3	
CHM 105		1	
CHM 124		3	
CHM 126		1	
*MTH 131		3	
STA 308 (4) <b>Or</b> STA 409 (3)		3-4	

<b>Free Electives</b>			
Courses taken beyond	_		al education. A
total of 120 earned cre	edits is required for gr	aduation.	
Course	Semester	Credits	Grade

Grade	Credits		Require
	Credits	Semester	Course
	3		NRS 305
	3		NRS 309
	3-4		NRS 406 (4) or NRS 407 (3)
	4		BIO 323
· ·	,	Concentration C	
e List	ration Course L	pproved Concent	**See a <sub>l</sub>
Grade	Credits	Semester	Course

# Supporting Electives (at least 24 credits) Must include at least 6 credits from NRS.

\*\*See approved Supporting Elective list

Courses may be selected from Concentration courses (see approved list) or

from Supporting Electives (see approved list). Students interested in a care

from **Supporting Electives** (see approved list). Students interested in a career as a Wildlife Biologist with the federal government should include 3 credits of botany. Students interested in becoming a Certified Wildlife Biologist should include 3 credits in botany, 6 credits in zoology, 6 credits in resources policy or planning, and 6 credits in communication. Up to 12 credits of experiential learning courses may be taken. A maximum of 10 credits of exp. learning courses may be used for Concentration credit (letter grade only) and up to 12 credits of exp. learning courses may be used for Suppt. Electives (Letter Grade or S/U). **Senior Colloquium (NRS 480, 2 cr.) is strongly recommended.** 

Course	Semester	Credits	Grade

Minimum 2.0 cumulative GPA required in major for graduation.

Minimum overrall 2.0 cumulative GPA required for graduation.

<sup>\*</sup>Courses approved for general education.

## B.S. Wildlife & Conservation Biology - Effective Fall 2018 College of the Environment and Life Sciences

Approved Concentration Courses (9 - 11 credits)		
Course (credits)	If seeking federal wildlife biologist (GS-486) job	If seeking TWS Wildlife Biologist Certification
NRS 304 Field Ornithology (3)	X <sup>1</sup>	X <sup>1</sup>
NRS 324 Mammalogy (4)	X <sup>1</sup>	X <sup>1</sup>
*NRS 330G The Biodiversity Crisis (3) A1, C2, G		
NRS 401: Foundations in Restoration Ecology (4)		
NRS 402: Quantitave Wildlife Ecology (3)		X <sup>2</sup>
NRS 403: Quantitave Wildlife Ecology Field Investigations (1)		
NRS 406: Wetland Wildlife Management (4)		
NRS 407: Endangered Species Conservation (3)		
NRS 409 Concepts in GIS and Remote Sensing (4)		
NRS 410: Fundamentals of GIS (3)		
NRS 415: Remote Sensing of the Environment (3)		
NRS 417 Herpetology (4)	X <sup>1</sup>	X <sup>1</sup>
NRS 419: Field experience in Herpetology (1)		
NRS 491/492: NRS special projects (1-3) <sup>3</sup>		
NRS 497 Cooperative Internship (6 or 12) <sup>3</sup>		
NRS 423: Wetland Ecology (4)		
NRS 475: Coral reef Conservation (3)		
NRS 516 Remote Sensing in Natural Resources Mapping (3)		X <sup>2</sup>
NRS 520: Quantitative Tech. in Natural Resource Research (3)		X <sup>2</sup>
NRS 522 Advanced GIS Analysis Of Environmental Data (3)		X <sup>2</sup>
NRS 533: Landscape Pattern And Change (3)		
BIO 366: Vertebrate Biology (3)	X <sup>1</sup>	X <sup>1</sup>
BIO 455: Marine Ecology (3)		
BIO 467 Animal Behavior (3)	X <sup>1</sup>	X <sup>1</sup>
BIO 480: Community Ecology (3)		
BIO 485: Salt Marsh Ecology (4)		
*CSC 201: Introduction to Computer Programming (4) B3		X <sup>2</sup>
*MTH 141: Introductory Calculus With Analytic Geometry (4) A1,B3		X <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Select two of these five courses

Note: Courses marked with an asterisk (\*) can be used to satisfy major and general education requirements.

<sup>&</sup>lt;sup>2</sup> Select one of these six courses (NRS 402 recommended)

<sup>&</sup>lt;sup>3</sup> Maximum of 10 credits of experiential learning courses (letter grade courses only) can count for concentration credits

## B.S. Wildlife & Conservation Biology - Effective Fall 2018 College of the Environment and Life Sciences

## WILDLIFE & CONSERVATION BIOLOGY APPROVED SUPPORTING ELECTIVES:

At least 24 credits taken from the following categories, of which **at least 6 credits** must be NRS courses, based on certification guidelines established by The Wildlife Society and federal government. Approved courses may change with availability or with approval of your advisor.

Botany (3 credits) 112	Resource Policy, Administration, or
NRS 301 Forest Science (3)	Land Use Planning (6 credits) <sup>2</sup>
NRS 423 Wetland Ecology (4)	CPL 434 Intro. to Environmental Law (3)
NRS 425 Wetlands Field Investigations (1)	*MAF 100 Human Use Marine Environment (3) A2, C1
NRS 445 Invasive Species (4)	MAF 120 New England & The Sea (3)
NRS 485 Salt Marsh Ecology (4)	*MAF 220 Intro. Marine & Coastal Law (3) A2, C1
BIO 311 Plant Structure & Development (4)	MAF 312 Politics of the Ocean (3)
BIO 321 Plant Diversity (4)	MAF 461 Coastal Zone Management (3)
BIO 346 Plant Physiology (3)	MAF 471 Critical Island Studies (3)
BIO 352 General Genetics (4)	MAF 484 Env. Anal. & Policy Coastal Mgt. (3)
BIO 365 Biology of Algae (4)	*NRS/GEO/EEC 234G Introduction to Water Resources (3) A1, G
BIO 418 Ecology of Marine Plants (4)	*NRS 300 Issues in Global Sustain.Dev. (3) A2, C2
BIO 353 Genetics Laboratory (1)	*NRS 330G The Biodiversity Crisis (3) A1, C2, G
Zoology (6 credits) <sup>2</sup>	NRS 401 Foundations in Restoration Ecology (4)
NRS 304 Field Ornithology (3)	NRS 424 Wetlands & Land Use (4)
NRS 324 Mammalogy (4)	NRS 450G Soil Land Use and the Environment (3) D1, G; and
NRS/BIO/ENT 388 Biology of Bees & Pollination Ecology (3)	NRS452G Soil, Water, and Land Use Investigation (1) D, G
NRS 417 Herpetology (4)	Communications (6 credits) <sup>2</sup>
NRS 419 Field Experience in Herpetology (1)	*JOR 110 Introduction to Mass Media (3) A3, C1
NRS 505 Biology & Man.Migratory Birds (2)	JOR 220 Media Writing (3)
NRS 534 Ecol. Fragmented Landscapes (2)	JOR/PRS 340 Public Relations (3)
NRS 538 Physiological Ecology (3)	COM 202 Public Speaking (3)
BIO 201 General Animal Physiology (3)	COM 208 Argumentation and Debate (3)
BIO 272 Intro Evolution (4)	COM 210 Persuasion: The Rhetoric of Influ. (3)
BIO 286 Humans, Insects, and Disease (3)	COM 251 Small Group Communication (3)
BIO 302 Animal Development (4)	COM 310 Topics in Communication (3)
BIO 354 Invert. Zoology (4)	*WRT 201 Argument. & Persuasive Texts (3) B1, B4
BIO 355 Marine Invert. of Southern N.E. (3)	WRT 235 Writing in Electronic Env. (4)
BIO 360 Marine Biology (4)	*WRT 332 Technical Writing (3) B1, B2
Experiential Learning Courses	*WRT 334 Science Writing (3) B1, B2
Up to 12 credits of Experiential Learning Courses may be taken. A maximum of	WRT 533 Grad. Writing in Life Sciences (3)
10 credits of exp. learning courses may be used for concentration credit (letter	
grade only) and up to 12 credits of exp. learning courses may be used as supporting lectives (letter grade or S/U)	
	4
NRS 395 Research Apprenticeship (1-3) S/U only	

NRS 397 Internship (1-6) **S/U only** NRS 491/492: NRS special projects (1-3)

NRS 495 Advanced Apprenticeship (3) S/U only NRS 497 Cooperative Internship (6 or 12) NRS 498 Teaching Practicum (1-3) S/U only

Note: Courses marked with an asterisk (\*) can be used to satsify major and general education requirements.

<sup>&</sup>lt;sup>1</sup> Select if considering federal biologist (GS-486) position

<sup>&</sup>lt;sup>2</sup> Select courses from these lists (Policy, Zoology, Communications if considering TWS Wildlife Certification

## **B.S. Wildlife & Conservation Biology - Effective Fall 2018**

## College of the Environment and Life Sciences

## **SAMPLE Four-Year Plan**

#### Freshman Year Fall Semester

Course Code	Description	Cr
*NRS 100	Natural Resource Conservation	3
NRS 101	Freshman Inquiry into NRS	1
URI 101	Planning for Academic Success	1
*BIO 101/103	Principles of Biology I/ Lab	4
*MTH103, 111, or 131	Applied Precalculus, Precalculus, or Applied Calculus (based on placement)	3
	*General Education Course	3-4
		15-16

Freshman Year Spring Semester

Course Code	Description	Cr
NRS 223	Conservation Biology	4
*BIO 102/104	Principles of Biology II/ Lab	4
*CHM 103/105	Introductory Chemistry/ Lab	4
*MTH 131, or *General Ed.	Applied Calculus, or General Education Course	3-4
		15-16

Note: MTH131 is required for WCB majors. Math placement determines if a prerequisite is needed (MTH103 or 111).

Year 1 Milestones: Complete 30 credits with a cumulative gpa of 2.0 or higher. Transfer from UC to CELS. NRS100 & NRS223 (offered fall and spring). Grades of C or higher required in BIO101, 102, 103, 104, NRS100. Consider a summer internship.

Sophomore Year Fall Semester

Sophomore real ran Semester		
Course Code	Description	Cr
NRS 200	Seminar in Natural Resources	1
*EEC 105	Intro to Resource Economics	3
BIO 262	Introductory Ecology	4
NRS 212	Intro to Soil Science	4
	*General Education Course	3-4
		15-16

Sophomore Year Spring Semester

Course Code	Description	Cr
CHM 124/126	Intro. to Organic Chemistry/Lab	4
NRS 305	Prin. Wildlife Management	3
STA 308	Introductory Statistics	4
	Free Elective	3
	*General Education	3
		15-17

Year 2 Milestones: Complete 60 credits with a cumulative gpa of 2.0 or higher. NRS200 & NRS212 (offered fall only), NRS305 (offered spring only). BIO262 should be completed sophomore year. Meet with faculty advisor to plan jr/sr year courses and discuss internship/research/study abroad opportunities.

Junior Year Fall Semester

Junoi Teat Tun Bemester		
Course Code	Description	Cr
BIO 323	Field Botany & Taxonomy	4
NRS 304 or BIO 366	Field Ornithology Vertebrate Biology	3
	*General Education Course	3
	Free Elective	3
	NRS Supporting Elective	3-4
		16-17

Junior Year Spring Semester

Course Code	Description	Cr
NRS 309	Wildlife Management Tech.	3
NRS 324	Mammology	4
	NRS Supporting Elective	3
	*General Education Course	3
BIO 467	Animal Behavior	3
		16-17

Year 3 Milestones: Complete 90 credits with a cumulative gpa of 2.0 or higher. BIO323 (offered fall & summer only), NRS 309 (offered spring only). Meet with faculty advisor to plan senior year courses, discuss internship/research opportunities, and prepare Intent to Graduate Application for fall submission.

Senior Year Fall Semester

Semoi Teal I an Semester		
Course Code	Description	Cr
NRS 304 or BIO 366	Field Ornithology Vertebrate Biology	3
	NRS Supporting Elective	3-4
	NRS Supporting Elective	3-4
	Free Elective	3
	NRS Concentration	3-4
		15-17

Senior Year Spring Semester

Course Code	Description	Cr
NRS 406 or NRS 407	Wetland Wildlife (4); or Nongame & Endangered Species Mgt (3)	3-4
NRS 417	Herpetology	4
	NRS Supporting Elective	3-4
NRS 402/403	Wildlife Biometrics Field Investigations	4
	NRS Internship	
		15-17

### **Total Credits to Graduate = 120**

Year 4 Milestones: Complete all remaining courses and requirements. NRS406 and 407 (offered spring only). Turn in Intent to Graduate packet fall semester. Minimum of 120 earned credits with a cumulative gpa of 2.0 or higher; and a minimum 2.0 gpa in major concentration courses.

NOTE: Visit http://web.uri.edu/nrs/undergraduate-programs/ for a list of NRS fall & spring courses & confirm with your advisor.