



NATURAL RESOURCES CONSERVATION Wildlife Ecology & Conservation

Fall Semester

Spring Semester

First year	# Credits		# Credits
Intro Environment elective	4 ^a	Intro Biology elective II (BS)	3/4/5 ^b
Intro Biology elective I (BS)	4 ^b	Communication elective	3 ^g
MATH 104 or 101/102 (R1)	3 or 2/2	ENGLWRIT 112 Coll. Writing (CW)	3
Earth Science elective	<u>3/4^e</u>	Gen Ed (AT/AL/HS+DU/DG)	<u>4</u>
<i>Total Credits</i>	<u>≥13</u>		<u>≥14</u>

Sophomore Year

NRC 212 Forest Tree & Shrub ID	2	NRC 261 Wildlife Cons.	3
NRC 260 Fish. Cons. & Mgt.	3	NRC 211 Wildlife Sampling & ID	2
Built Environment elective	3/4 ^f	NRC 225 Forests & People	3
NRC 240/290B (R2)	4 ^d	Ecology elective	3 ^h
RES-ECON elective (SB)	<u>4^c</u>	Chemistry 111 (PS)	<u>4^k</u>
	<u>≥15</u>		<u>16/17</u>

Junior Year

NRC 564 Wildlife Hab. Mgt	4	Evolution elective	3 ^l
Integrated Experience elective (IE)	4 ^j	Quantitative elective	3/4 ^m
Physical Science elective	3 ⁱ	NRC/BIOL animal elective	4 ⁿ
Gen Ed (AT/AL/HS+DU/DG)	<u>4</u>	NRC 309 Nat. Res. Policy	<u>3</u>
	<u>≥16</u>		<u>≥14/15</u>

Senior Year

NRC 565 Wildlife Pop. Dynamics	4	NRC/BIOL animal elective	4 ⁿ
NRC 585 Introduction to GIS	4	_____	3
NAT-SCI 387 CNS Jr. Writing	3	_____	4
<i>Recommended: Comm elective II</i>	<u>3^g</u>	_____	<u>4</u>
	<u>≥15</u>		<u>≥15</u>

Note: All students need at least 120 credits to graduate – please check your ARR in SPIRE





Students interested in Wildlife Society certifications should visit their website for more information. The UMass Student Chapter of the Wildlife Society is also a resource for this certification. Students need a total of 120 total credits and to complete all general education requirements to graduate. Please review your ARR in SPIRE regularly and contact your advisor with any questions.

NRC elective course options (additional information is on the NRC website or SPIRE):

- ^a Intro. Environment elective options - NRC 100 (SI, fall) preferred, NRC 185 (I, spring) and ENVIRSCI 101 (BS, fall) accepted
- ^b Intro. Bio. elective – BIOL 151 & 152 (153 lab optional) – strongly encouraged for all wildlife students, required for those interested in the Wildlife Society certificate; or STOCKSCH 108 (fall) & BIOL 110 (spring)
- ^c Chemistry elective – CHEM 110 (no longer offered) or 111 (fall, spring)
- ^d Statistics elective – NRC 290B preferred (f), if not possible: RES-ECON 212, STATISC 111, 240, or 501 (f,s)
- ^e Earth Science elective– GEOLOGY 101 (f,s), 103 (f,s), 105 (f,s), 201 (s), GEOGRAPH 100 (f), GEOGRAPH 110, STOCKSCH 105 (f,s), or ENVIRSCI 390A (f)
- ^f Built Environment elective – BCT 150 (f), NRC 290C, NRC 297R (f), GEOGRAPH 372, SUSTCOMM 125 or 574.
- ^g Communication electives – (One is required, but to qualify as a Associate Wildlife Biologist with the Wildlife Society - you will need 2 total) – NRC 492A (f), or COMM 118 (f), 121 (f,s), 122 (f,s), 125 (f,s), 140 (f,s), 250 (f,s), 260, COMP-LIT 290T (f,s; AL G), ENG 379, JOURNAL 201, 292N
*Note: many COMM 100-level courses are limited to first years and sophomores only!
- ^h Ecology elective – ENVIRSCI 214 preferred (s), NRC 270, 547, BIOLOGY 287 (f,s), or upper-level ecology elective as approved (see your advisor)
- ⁱ Physical Science elective – CHEM 112, 250 (s), PHYSICS 100 (f,s), 118 (f), 131, ASTRON 100, 101, and 105 (s)
- ^j Integrated Experience elective – NRC 494EI, NRC 490S, NRC 382, or ENVIRSCI 445
- ^k Resources Economics elective – RES-ECON 263 (f) or RES-ECON 262 (s)
- ^l Evolution elective – NRC 390E (spring, prerequisite to NRC 580) or BIOL 280 (f,s)
- ^m Quantitative elective – Upper level statistics [STATISC 501 (f,s), EDUC 555 (f)], NRC 577 (Ecological Modelling, f), NRC 534 (Forest Measurements, f), MATH 127 (Calculus), additional upper-level spatial data elective (see your advisor)
- ⁿ NRC/Biology animal elective –
At least 1 of the following:
BIOL 544 – Ornithology (spring)
BIOL 548 – Mammalogy (spring)
If only 1 of the above, 1 more of the following:
NRC 563 – Wetlands, Wildlife Ecology and Management (spring)
NRC 580 – Conservation Genetics (if offered) – Note NRC 390E is a pre-requisite
NRC 566 – Restoration Ecology
NRC 597CB ST – Conservation and Animal Behavior (if offered)
BIOLOGY 521 – Comparative Vertebrate Anatomy (fall)
BIOLOGY 542 – Ichthyology (if offered)
BIOLOGY 551 – Animal Communication (fall; BIOLOGY 280 with a grade of C or better is a pre-req)
BIOLOGY 566 – Comparative Animal Physiology (spring; C or better in BIO 151 and 152 required)