

UNBC Courses required for BSc Wildlife and Fisheries Degree (2018)	A. Wildlife Management	B. Wildlife Biology	C. Ecology	D. Zoology	E. Botany	F. Physical Sciences	G. Basic Statistics	H. Quantitative Sciences	I. Humanities and Soc. Sci.	J. Communications	K. Policy, Administration, and Law	Notes

Required in degree

BIOL 103-3 Introductory Biology I				1.5	1.5							Include both lecture and lab course together in box (total credits) and include both course descriptions in both the D and E categories. Also include the note "(Counting 0.5 hours under Zoology and 0.5 hours under Botany)".
BIOL 123-1 Introductory Biology I Laboratory				0.5	0.5							
BIOL 104-3 Introductory Biology II				1.5	1.5							Include both lecture and lab course together in box (total credits) and include both course descriptions in both the D and E categories. Also include the note "(Counting 0.5 hours under Zoology and 0.5 hours under Botany)".
BIOL 124-1 Introductory Biology II Laboratory				0.5	0.5							
CHEM 100-3 General Chemistry						3						Include both lecture and lab course together in box (total credits) and include both course descriptions
CHEM 120-1 Chemistry Lab I						1						
CHEM 101-3 General Chemistry II						3						Include both lecture and lab course together in box (total credits) and include both course descriptions
CHEM 121-1 Chemistry Lab II						1						
MATH 152-3 Calculus for Non-majors							3					Enter course description
PHYS 115-4 General Intro to Physics or PHYS 100-4 Intro to Physics						4						Enter course description
BIOL 201-3 Ecology			2							1		Entire tutorial to Ecology deals with how to write in science, so make clear in application. In addition to entering the course description in both the C and J categories, include the note "(Only 2 of the 3 hours are counted in this category with 1 being used under Communications — a semester long tutorial with this class focuses exclusively on scientific writing)".
BIOL 210-3 Genetics				1.5	1.5							1.5 credit hours counted under each of Zoology and Botany. In addition to including the course description in both the D and E categories, include the note "(Counting 1.5 hours under Zoology and 1.5 hours under Botany)".
CHEM 220-3 Organic and Biochemistry						3						Enter course description
FSTY 205-3 Introduction to Soil Science						3						Enter course description
FSTY 207-1 Terrestrial Ecological Classification			1									Needed in Ecology category because 1 credit hour of Biol 201 used in writing category
STAT 240-3 Basic Statistics							3					Enter course description
NREM 204-3 Introduction to Wildlife and Fisheries	1.5			1.5								Covers Fish and Wildlife so 1.5 in Wildlife Management and 1.5 in Zoology; in addition to including course description in both the A and D categories, include "(course is 3 credit hours; counting 1.5 for wildlife management content)". Note also that you may need to use the 'additional space' block to include NREM 204-3 in the D category.
BIOL 302-3 Limnology						3						Enter course description
BIOL 307-3 Ichthyology and Herpetology		1.5		1.5								Half of course associated with Herpetology using in Wildlife Biology with balance in Zoology. After entering the course description in both the B and D categories, include the note "(Course is 3 credit hours with 1.5 counted in this category and 1.5 under Zoology to split out fish and herpetology subject matter)".
BIOL 308-3 Ornithology and Mammalogy		3										Enter course description
BIOL 315-3 Animal Diseases and Parasites				3								Enter course description
BIOL 325-3 Ecological Analyses								3				Because of 10 abstracts (marked for improvement in writing) could use 1 credit of BIOL 325 in Communications category if you have additional Quantitative Science courses (GIS does not count). If you have additional H category courses, then make case for 1 hour of BIOL 325 in category J.
BIOL 406-3 Fish Ecology				3								Enter course description
BIOL 410-3 Populations and Communities	3											Enter course description
BIOL 411-3 Conservation Biology	3											Enter course description
BIOL 412-3 Wildlife Ecology		3										Enter course description
BIOL 413-3 Wildlife Management	2									1		Split between Wildlife Management and Communication because of 5 writing assignments several in TWS Journal format. After including course description, include "(Counting 2 of 3 credits under management because 1 credit is assigned to Communication. In BIOL 413 40% of the grade is assigned to the writing up of wildlife data analyses in JWM journal format. These 5 papers are used to improve on the students' technical writing skills)."

Select one of options

NRES 100-3 or ENGL 170-3										3		Either course acceptable in Communications category; presumably could take both
FSTY 201-3 Forest Plant Systems or BIOL 301-3 Systematic Botany				3								Either course acceptable in the Botany category so just enter the course description for the course you took
One of: NREM 303-3 (Aboriginal Perspectives on Land and Resource Management) Or NREM 306-3 (Society, Policy, and Administration)										3		Either course acceptable in the Policy, Administration, and Law Category
For one of: ENPL 305-3, NREM 411-3 or ENVS 326-3, take ENVS 326-3 (Natural Resources, Environmental Issues and Public Engagement)										3		Take ENVS 326-3 for credit in the Communication category because of strong mentored writing requirement. Be sure to emphasize in comments the strong emphasis of this course on public engagement and learning to write.
For BIOL 402-3 or BIOL 404-3, take BIOL 404-3 (Plant Ecology)					3							Could take BIOL 404-3 for Botany credit, but have 3 extra Botany credits if Biol 402-3 taken
For one of: NREM 400-4, NREM 410-3 or NREM 333-1, take NREM 400-4 (Natural Resource Planning)										4		Select NREM 400-4 from this one-of choice

Electives (total of 15)

NRES 430-6 (Undergraduate Thesis)												If taken, need to make the case for strong, mentored writing component (learning to write). Course certainly use 3 hours of credit from an undergraduate thesis, but could argue for more on the basis of learning to communicate in science. For example, "students have to write both a detailed research proposal as well as their undergraduate thesis and then present the results in open-to-the-public event at the end of the Winter semester".
NRES 421-1 (Professional Writing)										1		The CRB indicated that all students should consider taking this course.
Consider taking NREM 411-3 as an elective and counting for 3 humanities credits										3		NREM 411-3 could instead be used in the Policy, Administration, and Law category
Nine hours of humanities (6 if take NREM 411) to meet 9 hours of humanities										6		3 Humanities needed if NREM 411 not counted as a Humanities course

Required degree course not used for Certification

NREM 100-3 Field Skills												These courses could be used in various categories, but the above curriculum requirements appear to cover off the educational requirements for AWB.
NREM 101-3 Intro to Natural Resource Management and Conservation												
Select 2 of: BIOL 202-3 (Invertebrate Zoology)												
BIOL 204-3 (Plant Biology)												
NREM-210-4 (Integrated Resource Management)												
GEOG 210-3 (Introduction to Earth Science)												
GEOG 300-3 Geographic Information Systems												
BIOL 414-3 Fish Management												
Credit hours taken												Additional Note. In the additional space for category J, indicate that "there is significant additional writing across the Wildlife and Fisheries curriculum. For example in Biol 325 (Ecological Analyses) students write 10 scientific abstracts in which they scientifically present the results of statistical analyses. There are also substantial other writing requirements in many of our upper-division courses.
Credit hours required	9.5	7.5	3	15	12	21	3	6	9	[9]	7	
Total for Biological Sciences (A through E) (36 credit hours required)	46	6	6	3	9	9	9	3	6	9	12	6