

MONTANA STATE UNIVERSITY - DEPARTMENT OF LAND RESOURCES & ENVIRONMENTAL SCIENCES

Degree Requirements for a B. S. in Environmental Sciences

2014 - 2015 Catalog

Name: _____ **GID#** _____ **Date:** _____ **Graduating Semester:** _____

A minimum of 120 credits is required for graduation; at least 42 of these credits must be in courses numbered 300 and above.

ALL DEPARTMENTAL REQUIREMENTS & THEIR PREREQUISITES MUST BE A GRADE OF C- OR BETTER

GRADUATION WORKSHEETS ARE DUE ONE YEAR BEFORE GRADUATION

DEPARTMENTAL REQUIREMENTS: 61-63 Credits

Subject/#	Course Title	Credits	Semester	Year	EXCEPTIONS
Freshman Year					
ENSC 110	Land Resources & Environmental Sciences	3	F		
BIOB 170IN	Principles of Biological Diversity	4	F S (F)		
BIOB 160	Principles of Living Systems	4	F S (S)		
CHMY 141	College Chemistry I	4	F S Su (F)		
CHMY 143	College Chemistry II	4	F S Su (S)		
M 161Q (or higher)	Survey of Calculus	4	F S Su (S)		
WRIT 101W	College Writing I	3	F S Su		

WRIT 101W is waived with an ACT English Score of 28 or higher, an SAT Critical Writing score of 650 or higher, an MUS Writing Assessment of 5.5, or an ACT/SAT essay/writing subscore of 11.

University Core & Electives	US Seminar recommended	3	F S Su		
Sophomore Year					
ENSC 245IN	Soils	3	F		
ENSC 260	Evolution for Environmental Scientists	3	S		
GPHY 262 or GPHY 284	Spatial Sci Tech & Apps Intro to GIS Science & Cartography	3 3	S F S (F)		
PHSX 205	College Physics I	4	F S Su (F)		
WRIT 201	College Writing II	3	F S Su (S)		
STAT 216 (or higher)	Intro to Statistics	3	F S Su (F)		
University Core & Electives		12			

Junior Year					
ENSC 353	Environmental Biogeochemistry	3	F		
ENSC 464 or ENSC 465	Computational Techniques for Envir Sci Environmental Biophysics I	1 3	S S		
NRSM 240 or BIOE 370	Natural Resource Ecology General Ecology	3 3	F S		
University Core & Electives		21-23			

Senior Year					
ENSC 444	Watershed Hydrology	3	F		
NRSM 430	Natural Resource Law	3	S		
PSCI 362	Natural Resource Policy	3	S		
ENSC 499R	LRES Capstone	3	F		
University Core & Electives		21			

CORE 2.0 REQUIREMENTS - Must be a grade C- or better	Semester	Year	Course
Seminar (US)			
College Writing (W)*			
Quantitative Reasoning (Q)*			
Diversity (D)			
Contemporary Issues in Science (CS)* 2nd IN Course will apply to CS			
Arts (IA or RA)			
Humanities (IH or RH)			
Social Sciences (IS or RS)			
Natural Science (IN or RN)*			
Research & Creative ExperienceR (R, RA, RH, RN or RS)			

*Satisfied by departmental requirements

RESTRICTED ELECTIVES - Choose at least 21 credits of directed electives from the following:					
Subject/#	Course Title	F	S	Year	EXCEPTIONS
AGSC 401	Integrated Pest Management	3			
AGSC 428	Sustainable Cropping Systems		3		
BIOE 375	Ecological Response Climate Change		3		
BIOE 408	Rocky Mountain Vegetation	2			
BIOE 416	Alpine Ecology		3 (Su)		
BIOE 422	Insect Ecology	3	S'od		
BIOE 428	Freshwater Ecology	3			
BIOE 455	Plant Ecology		3		
BIOM 415 (Spring odd years)	Microbial Diversity, Ecology & Evolution		3		
BIOM 452 (Spring even years)	Soil & Water Environmental Microbiology		3		
ENSC 407	Environmental Risk Assessment	3			
ENSC 410R	Biodiversity Survey & Monitoring Methods	3			
ENSC 443	Weed Ecology & Management	3			
ENSC 445	Watershed Analysis		3		
ENSC 448	Stream Restoration Ecology	3			
ENSC 460	Soil Remediation		3		
ENSC 461	Restoration Ecology	3			
ENSC 468	Ecosystem Biogeochemistry		3		
ERTH 307	Prin of Geomorphology	3			
ERTH 432R	Surface Water Resouces		3		
GPHY 357	GPS Fund/Apps in Mapping	3			
GPHY 384	Adv GIS & Spatial Analysis	3	3		
GPHY 426	Remote Sensing	4			
GPHY 429R	Applied Remote Sensing		3		
GPHY 457	Adv GPS Mapping for GIS	3			
GPHY 484R	Applied GIS & Spatial Analysis		3		
NRSM 421	Holistic Thought & Management		4		
NRSM 455	Riparian Ecololgy & Management		3		
WILD 438	Wildlife Habitat Ecology		3		

FREE ELECTIVES - Choose 21-23 credits of free electives, 15 of which must be 300/400 level.					
Subject/#	Course Title	Credits	Semester	Year	EXCEPTIONS

Because some courses are offered alternate years, the proposed scheduling of courses in junior and senior years may need to be modified. Work with your advisor for your individual schedule.
 LRSM Majors: ENSC 490 Undergrad Research, ENSC 492 Independent Study or ENSC 498 Internship is strongly recommended.

Student:	Date:
Advisor:	Date:
Certifying Officer:	Date: