MONTANA STATE UNIVERSITY - COLLEGE OF AGRICULTURE
Department of Land Resources & Environmental Sciences
Degree Requirements for a B.S. in Environmental Sciences/Environmental Biology Option
2008-2010 Catalog Curriculum: ESEB

Name: **ID#:** **Date:** **Graduating Semester:**

Total semester credits must equal a minimum of 120 credits; Total upper division must equal a minimum of 42 credits
ALL DEPARTMENTAL REQUIREMENTS & THEIR PREREQUISITES MUST BE A GRADE OF C- OR BETTER

DEPARTMENTAL REQUIREMENTS

Subject/#	Course Title	Credits	Semester	Year	Sub/TR/Comments
LRES 110	Land Resources & Environ Sci	3	F		
CHMY 141	College Chemistry I (CHEM 131)	4	F S Su		
CHMY 143	College Chemistry II (CHEM 132)	4	F S Su		
ECNS 101IS	Econ Way of Thinking (ECON 101)	3	F S		
Take one of the following:					
M 161Q	Survey of Calculus (MATH 170)	4	F S Su		
M 165Q	Calculus for Technology I (MATH 175)	3	F S		
M 171Q	Calculus I (MATH 181)	4	F S Su		
Students who anticipate graduate study or technical employment are strongly advised to complete a two-semester calculus sequence. M 165 - 166 or M 171-172					
WRIT 101W	College Writing I (ENGL 121)	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.**					
BIOL 213	Intro Biology: Cells-Organisms	4	S		
BIOL 214	Intro Biology: Molecules-Cells	4	F		
CHMY 211	Elements Organic Chem (CHEM 215)	5	F S		
LRES 201IN	Soil Resource	3	F		
LRES 244CS	Intro Water Resources	3	F		
PHYS 205	College Physics I	4	F S Su		
Take one of the following:					
PSPP 318	Biometry	3	F		
STAT 216Q	Intro to Statistics	3	F S Su		
WRIT 201	College Writing II (ENGL 221)	3	F S		
Take one of the following:					
ARNR 240	Natural Resource Ecology	3	F		
BIOL 303	Principles of Ecology	3	S		
BCHM 340	General Biochemistry	5	F S Su		
BIOL 301	Principles of Genetics	3	F S		
LRES 310	Professional Preparation	1	S		
LRES 351	Nutrient Cycling	3	S		
LRES 355	Soil & Environ Chemistry	3	S'od		
MB 301	General Microbiology	5	F S		
BIOL 403	Evolution	3	S		
LRES 415	Microbial Divers, Ecology, Evol	3	S'ev		
LRES 441	Capstone 1 Field Applic LRES	1	S		
LRES 442R	Capstone 2 Field Applic LRES	3	F		
LRES 452	Soil & Environ Microbiology	3	S'od		
LRES 453	Soil & Environ Physics	3	F'od		

ADVANCED ELECTIVE COURSES - CREDITS REQUIRED: 12					
Students must work with their advisor to develop a list of advanced courses based on academic and professional goals. Before their Senior year, and before taking any of the proposed credits, students must submit this list together with a written statement justifying the courses selected for approval by the dept.					
Dept/#	**Subject**	**Cr**	**Semester**	**Year**	**Sub/Transfer/Comments**
Environmental Microbiology:					
MB 420	Microbial Physiology	3	F		
MB 433	Applied & Environ Microbiology	4	S		
MB 449	Microbial Genetics	3	S		
MB 450	Res Methods Microbiology	4	S		
PSPP 423	Mycology	3	F'ev		
Enivronmental Macrobiology					
BIOL 405	Behavioral & Evolutionary Ecol	3	S		
BIOL 411	Animal Physiology	3	F		
BIOL 415	Icthyology	3	S		
BIOL 418	Mammalogy	3	F		
BIOL 419	Ornithology	3	S		
BIOL 430	Plant Physiology	3	S		
Natural Ecosystems					
LRES 444	Watershed Hydrology	3	F		
LRES 445	Watershed Analysis	3	S		
BIOL 406	Rocky Mtn Vegetation	2	F		
BIOL 424	Freshwater Ecology	3	F		
Applied Ecology					
LRES 344	Water Quality	3	S		
LRES 401	Integrated Pest Management	3	S'ev		
LRES 426	Remote Sensing	3	F		
LRES 443	Weed Ecology & Mgmt	3	F		
LRES 461	Restoration Ecology	3	F		
ARNR 438	Wildlife Habitat Ecology	3	S		
ARNR 453	Habitat Inventory & Analysis	3	F		
F&WL 301	Prin Fish & Wildlife Mgmt	3	S		
Policy & Planning					
LRES 421	Holistic Thought & Mgmt	4	S		
ECNS 332	Econ of Natural Resources (ECON 332)	3	F		
PSCI 362	Natural Resource Policy (POLS 450)	3	S		

LRES Majors: LRES 476 Internship, LRES 470 Independent Study or LRES 490 Undergrad Research is strongly recommended.

Core 2.0 Requirements (Must be a grade C- or better)	Credits	Sem	Year
Seminar (US)			
Diversity (D)			
Writing (W)			
Quantitative Reasoning (Q)			
Contemp Issues in Science (CS)			
Arts (IA, RA)			
Humanities (IH, RH)			
Social Sciences (IS, RS)			
Natural Sciences (IN, RN)			
Research (R, RA, RH, RN, R)			

(Completion of UH 202 satisfies the IH requirement. Completion of at least two of the following courses satisfies both the CS and the IN requirements:
ARNR 240;
BIOL 101, 102, 204, 207, 208, 213, 214, 215, 251;
CHMY 121, 123, 141, 143, 151, 153, 211
GEO 101, 103, 205, 211; GPHY 111;
LRES 201;
MB 201; MBEH 210;
PHYS 205, 206, 211, 212, 213, 221, 222;
PSPP 102.)

3/09

Student Signature **Date**

Total Credits **Upper Division**

Advisor Signature **Date**

Dept. Certifying Officer Signature **Date**