

2004-2006

Land Rehabilitation

Name of Student _____

GID # _____

Catalog _____

Curriculum/Option _____

Total semester credits must equal a minimum of 120 credits

Total upper division must equal a minimum of 42 credits

DEPARTMENTAL REQUIREMENTS

Dept/#	Subject	Sem	Yr	Cr
LRES 110	Land Resources & Environ Sci	F		3
BIOL 101IN	Organismal Biology	F,S		4
BIOL 102	Molecular & Cellular Biol	F,S		4
CHEM 131	General Chemistry I	F,S,Su		4
CHEM 132	General Chemistry II	F,S,Su		4
ECON 101IS	Econ Way of Think	F,S,Su		3
ESCI 112CS	Physical Geography	F,S		4
ME 116	Engr Design Graph Lab	F,S		1
Choose 1:	MATH 170Q Sur of Calc	F,S,Su		4
	MATH 175Q Calc. Tech.I	F,S		3
	MATH 181Q Calc/Anal Geom I	F,S,Su		4
<i>Students who anticipate graduate study or technical employment are strongly advised to complete a two-semester calculus sequence. (175-176 or 181-182)</i>				
ENGL 121W	College Writing I	F,S,Su		3
<i>ENGL 121W is waived with an ACT English score of 27 or higher, or SAT Verbal score of 640 or higher.</i>				
LRES 201IN	Soil Resource	F		3
Choose 1:	ENGL 221 College Wrtg II	F,S		3
	ENGL 223 Technical Writing	F,S		3
PHYS 205	College Physics I	F,S,Su		4
BIOL 230	ID of Seed Plants	S		4
Choose 1:	ARNR 240 Natural Res Ecol	F		3
	BIOL 303 Prin of Ecology	S		3
GEOG 305	Intro Geog Info Sys (GIS)	F,S		3
LRES 310	Professional Preparation	S		1
LRES 355	Soil & Environ Chem	S'od		3
Choose 1:	PS 318 Biometry	F		3
	STAT 216Q Elem Statistics	F,S,Su		3
LRES 440	Field Applications in LRES	F		4
LRES 453	Soil & Environ Physics	F'od		3
LRES 454	Landscape Pedology	F		3
LRES 460	Soil Remediation	S		3
LRES 461	Restoration Ecology	F		3
ESCI 440	Ground-Water Resources	S		3
Choose 1:	LRES 444 Watershed Hydrology	F		3
	ESCI 432R Surface-Water Res	F		3
Choose 1:	ARNR 350 VegWest Wildlands	S		3
	BIOL 434 Agrostology	F'od		3
	BIOL 436 Plant Systematics	F'ev		3
ARNR 453	Habitat Inventory/Analysis	F		3

SUBSTITUTIONS FOR REQUIRED COURSES

Dept/#	Subject	Cr	for Dept/#	Cr

CORE 2.0 REQUIREMENTS

ALL CORE 2.0 REQUIREMENTS MUST BE A GRADE OF C- OR BETTER

See Page 55 of the 04-06 MSU Catalog for permitted substitutions for CS and IN requirements. Note that some of the required courses for this major will count toward completion of the CORE requirements.

- | Dept/# | Subject | Sem | Yr | Cr |
|---|---------|-----|----|----|
| Seminar (US) (1 course) | | | | |
| Quantitative Reasoning (Q) (1 Course) | | | | |
| Writing (W) (1 Course) | | | | |
| Inquiry-Arts (IA) 1 Course | | | | |
| Inquiry-Humanities (IH) (1 Course) | | | | |
| Inquiry-Social Sciences (IS) (1 Course) | | | | |
| Inquiry-Natural Science (IN) (1 Course) | | | | |
| Diversity (D) (1 Course) | | | | |
| Research & Creative Experience (R) (3 Credits) | | | | |
| Contemporary Issues in Science (CS) (1 Course) | | | | |

Total Credits _____ Upper Division _____

An independent research project or internship is strongly recommended for LRES majors:
 LRES 470 (Individual Problems) or
 LRES 476 (Internship) or
 LRES 489/490 (Undergrad Research/Research Instruction)

Student Signature _____ Date _____

Advisor Signature _____ Date _____

Dept. Certifying Officer Signature _____ Date _____

**SEE REVERSE SIDE FOR REQUIRED
 ADVANCED ELECTIVE COURSES**

RESTRICTED AND FREE ELECTIVES:

Working with their advisor, students will develop a focus area based on academic and professional goals. Before their senior year, and before completing any of the courses, students must submit a proposed list of courses and a statement justifying their selections in writing for approval by the department.

Select a focal area and 18 credits from the following electives:

Microbial/Bioremediation Focus

These 13 credits plus 5 from either Soil & Water focus, Plant/Revegetation focus or Additional Courses list

CHEM 215	Elem Organic Chem	F,S	5
MB 301*	Gen Microbiology	F,S	5
LRES 452*	Soil & Environ Microbiol	S'od	3

Soil & Water Sciences Focus

These 10 credits plus 8 from either Microbial/Bioremediation focus, Plant/Revegetation focus, or Additional Courses list

Choose 1: (not same as selected on front page):

LRES 444	Watershed Hydrology	F	3
OR			
ESCI 432R	Surface Water Resource	F	3
LRES 351	Nutrient Cycling	S	3
BREN 330	Water Resource Law	S'ev	2
LRES 451	Soils Field Course	F	2

Plant/Revegetation Focus

These 10 credits plus 8 from either Microbial/Bioremediation focus, Soil/Water focus, or Additional Courses list

BIOL 430*	Plant Physiology	S	4
LRES 443	Weed Ecology & Management	F	3
PS 433*	Plant Propagation	S	3

Additional Courses

GEOG 411	Adv GIS & Geog Anal	S'ev	3
LRES 357*	GPS Fund/Applic Map	F,S	3
F&WL 301	Prin of F&WL Mgmt	S	3
LRES 421	Holistic Thought/Mgmt	S	4
ARNR 456*	ConflictResolutionNatrIResMgmt	F	1
CE 442	Environmental Science	F	3

* Note: Prerequisite(s) are not met by courses in this curriculum