

ENVIRONMENTAL SCIENCE AND SUSTAINABILITY B.S. - SUSTAINABLE LIVELIHOODS AND COMMUNITIES

The Sustainable Livelihoods and Communities concentration provides students with an understanding of key social and institutional processes involved in transitioning to sustainable economies from global to local levels. Courses address the intersections between environment and development, natural resource governance and collaboration, and pathways to sustainability.

Bachelor of Science - Environmental Science and Sustainability; Sustainable Livelihoods and Communities Concentration

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements/>) of the catalog.

Summary

Code	Title	Hours
Lower-Division Required Courses		17-19
Sustainable Livelihoods and Communities Concentration Requirements		
Core Courses		9-11
Electives		27
Ecology		3
Ethics		3
Policy		3
Social Science		3
Experiential Learning Requirement		
Advanced Writing Requirement		
Total Hours		65-69

Degree Specific Credits: 65-69

Required Cumulative GPA: 2.0

Lower-Division Required Courses

Note: NRSM 110 will not be required if students declare the major with 60+ credits.

Code	Title	Hours
Complete the following courses:		
NRSM 110	First Year Seminar in Environmental Science and Sustainability	1
NRSM 121S	Environmental Science and Sustainability	3

Complete one of the following: 3-4

GPHY 111N Intro to Physical Geography: Climate, Landforms, and Vegetation
& GPHY 112N Intro to Physical Geography Laboratory: Climate, Landforms, and Vegetation

NRSM 211N Soils and Water
& NRSM 212N and Ecology, Physics and Taxonomy of Soils

Oral Communication - Complete one of the following courses:

COMX 111A Introduction to Public Speaking 3
or THTR 120A Introduction to Acting I

Statistics Requirement - Complete one of the following courses: 3-4

FORS 201 Forest Biometrics

STAT 216 Introduction to Statistics

WILD 240 Intro to Biostatistics

Chemistry - Complete the following course:

CHMY 121N Introduction to General Chemistry 4

Total Hours 17-19

Minimum Required Grade: C-

Sustainable Livelihoods and Communities Concentration Requirements

Rule: Complete all of the following subcategories.

Core Courses

Code Title Hours

Mathematics Requirement - Complete one of the following: 3-4

M 115 Probability and Linear Mathematics

M 121 College Algebra

M 122 College Trigonometry

M 151 Precalculus

M 162 Applied Calculus

Biology Requirement - Complete one of the following: 3-4

BIOB 160N Principles of Living Systems

BIOB 170N Principles of Biological Diversity

BIOE 172N Introductory Ecology

BIOO 105N Introduction to Botany

Complete the following course:

FORS 250 Intro to GIS for Forest Mgt 3

Total Hours 9-11

Minimum Required Grade: C-

Electives

Code Title Hours

Complete 5 of the following courses: 15

ENST 225S Sustainable Communities

GPHY 323S Economic Geography of Rural Areas

GPHY 421 Sustainable Cities

GPHY 433 Community Resilience

NRSM 379	Collaborations in Natural Resource Decisions	
NRSM 424	Community Forestry & Conservation	
NRSM 475	Environment & Development	
PTRM 451	Tourism & Sustainability	
Complete 4 of the following courses:		12
BMGT 410	Sustainable Business Practices	
ECNS 433	Economics of the Environment	
ENST 480	Food Justice and Sustainability	
FORS 320	Forest Environmental Economics	
GPHY 468	Community & Regional Analysis	
PSCI 463	Development Administration	
PTRM 210S	Nature Tourism & Commercial Recreation	
SOCI 470	Environmental Sociology	
Total Hours		27

Minimum Required Grade: C-

Ecology

Code	Title	Hours
Complete one of the following courses:		3
BIOE 447	Ecosystem Ecology	
FORS 330	Forest Ecology	
FORS 333	Fire Ecology	
Total Hours		3

Minimum Required Grade: C-

Ethics

Code	Title	Hours
Complete one of the following:		3
NRSM 349E	Climate Change Ethics and Policy	
NRSM 389E	Ethics and Sustainability	
Total Hours		3

Minimum Required Grade: C-

Policy

Code	Title	Hours
Complete one of the following courses:		3
NRSM 422	Natural Resource Policy and Administration	
NRSM 427	Water Policy	
NRSM 428	Climate Policy	
WILD 410	Wildlife Policy & Biopolitics	
Total Hours		3

Minimum Required Grade: C-

Social Science

Code	Title	Hours
Complete one of the following courses:		3
NRSM 326	Climate and Society	

NRSM 379	Collaborations in Natural Resource Decisions	
NRSM 424	Community Forestry & Conservation	
NRSM 475	Environment & Development	
PTRM 300	Recreation Behavior	
Total Hours		3

Minimum Required Grade: C-

Experiential Learning Requirement

Code	Title	Hours
Complete one of the following courses:		3
BIOE 342	Field Ecology	
BIOE 400	Aquatic Microbial Ecology	
BIOE 416	Alpine Ecology	
BIOE 439	Stream Ecology	
BIOE 440	Conservation Ecology	
BIOE 451	Landscape Ecology	
BIOE 453	Lake Ecology	
BIOE 458	Forest and Fire Ecology	
ENST 427	Social Issues: The Mekong Delta	
ENST 437	Climate Change: Mekong Delta	
FORS 130	Introduction to Forestry Field Skills	
FORS 440	Forest Stand Management	
GPHY 385	Field Techniques	
NRSM 115	First Year Seminar in Field Studies in Conservation	
NRSM 273	Wilderness and Civilization Field Studies	
NRSM 298	Internship	
NRSM 345	Watershed Dynamics	
NRSM 398	Internship	
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 498	Internship	
NRSM 499	Senior Thesis	
PTRM 150	First Year Seminar in Parks, Tourism, and Recreation Management	
PTRM 345X	Sustaining Human Society & Natural Environment	
PTRM 418	Winter Wilderness Field Studies	
PTRM 484	Capstone in Parks, Tourism, and Recreation Management	
WILD 374	Hunter Check Station	
Total Hours		3

Minimum Required Grade: C-

Advanced Writing Requirement

Code	Title	Hours
Complete three of the following courses:		9
BIOE 428	Freshwater Ecology	
BIOE 447	Ecosystem Ecology	

FORS 330	Forest Ecology
FORS 341	Timber Harvesting & Roads
FORS 347	Multiple Resource Silviculture
FORS 349	Practice of Silviculture
FORS 440	Forest Stand Management
FORS 499	Senior Thesis
NASX 403	Contemporary Tribal Resource Issues
NRSM 326	Climate and Society
NRSM 349E	Climate Change Ethics and Policy
NRSM 379	Collaborations in Natural Resource Decisions
NRSM 389E	Ethics and Sustainability
NRSM 462	Rangeland Ecology
NRSM 465	Foundations of Restoration Ecology
NRSM 475	Environment & Development
NRSM 495	Ecosystem Science and Restoration Practicum
NRSM 499	Senior Thesis
PTRM 300	Recreation Behavior
WILD 410	Wildlife Policy & Biopolitics
Total Hours	9

Minimum Required Grade: C-