MAJOR IN HUMAN DIMENSIONS OF NATURAL RESOURCES

The source of many challenges in natural resources involves human behavior, and solutions to those challenges requires innovative problem-solving, a deep understanding of complex issues, and collective action. This major is focused on understanding the social aspects of natural resources, and developing the skills to assess, plan, and implement strategies that lead to successful conservation. Curriculum for this major trains students in the areas of communication, leadership, systems thinking, collaboration, conflict management, decision-making, social science research in conservation, and conservation planning and management.

Learning Objectives

Students will:

1. Comprehend the institutions, policies, and actors that influence conservation outcomes and historical perspectives.
2. Understand the role of social science in achieving conservation outcomes.
3. Recognize and articulate the interdependencies and linkages within social-ecological systems, and how these linkages assist in understanding the drivers, processes and outcomes of environmental issues.
4. Gain appreciation for the value and benefit in addressing environmental issues through inclusive processes that invite a diversity of perspectives, world views, and ways of knowing.
5. Acquire skills to critically analyze social science research, and examine the role between human dimensions research and environmental decision-making.
6. Gain skills to effectively engage stakeholders in conservation action, and recognize their personal strengths and limits in influencing others to achieve positive conservation outcomes.
7. Acquire skills to effectively plan, design and deliver communication campaigns to achieve environmental outcomes.
8. Comprehend and critically analyze the policies, institutions and actors that influence environmental decision-making at different scales.
9. Gain the skills to effectively address conservation problems through application of theory, inquiry, planning, and related techniques.

Potential Occupations

Students are prepared for various positions with local, state and federal land management and natural resource agencies in the United States. Opportunities are also available both domestically and abroad with non-governmental, and nonprofit conservation and development organizations as well as private foundations. Examples of the types of positions include conservation planner/administrator, environmental communication specialist, conservation/environmental educator, nature center coordinator, visitor services manager, public outreach coordinator, public information officer, protected area manager, park/wilderness ranger, communication coordinator, policy liaison, environmental analyst, sustainability manager and others.

More Information

To learn more about the Human Dimensions of Natural Resources major, or to change to or declare this major, please click here (https://warnercnr.colostate.edu/hdnr/undergraduate-study/undergraduate-program-advising/) to schedule an individualized face-to-face or virtual meeting with an advisor.

Requirements
Effective Fall 2022

Freshman

		AUCC	Credits
CO 150	College Composition (GT-CO2)	1A	3
MATH 117	College Algebra in Context I (GT-MA1)	1B	1
MATH 118	College Algebra in Context II (GT-MA1)	1B	1
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	1
NRRT 193	New to the Major Seminar		1
SPCM 200	Public Speaking		3
Select 4 credits from the following groups:			4
Group A:			
BZ 110	Principles of Animal Biology (GT-SC2)	3A	
BZ 111	Animal Biology Laboratory (GT-SC1)	3A	
Group B:			
BZ 120	Principles of Plant Biology (GT-SC1)	3A	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	6
Biological and Physical Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)		3A	3
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)		3C	3

Elective			3
	Total Credits		**29**
Sophomore			
LAND 220/LIFE 220	**Fundamentals of Ecology (GT-SC2)**	**3A**	**3**
NRRT 231	Principles-Parks/Protected Area Management		3
NRRT 262	Principles of Environmental Communication		3
STAT 201	General Statistics (GT-MA1)	1B	3
Select one course from the following:			3
CO 300	Writing Arguments (GT-CO3)	2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	
JTC 300	Strategic Writing and Communication (GT-CO3)	2	
1C (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)		1C	3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Guided Electives (see list below)			3
Electives[1]			4
	Total Credits		**28**
Summer			
Select one course from the following:			5
NR 220	Natural Resource Ecology and Measurements		
NR 382A or 382B			
	Total Credits		**5**
Junior			
NR 319	Introduction to Geospatial Science		4
NR 320	Natural Resources History and Policy		3
NR 377	Pre-Internship		1
NR 400	Public Communication in Natural Resources		3
NRRT 330	Social Aspects of Natural Resource Management		3
NRRT 340	Principles in Conservation Planning and Mgmt		3
NRRT 362	Environmental Conflict Management		3
NRRT 376	Human Dimensions Research and Analysis		3
Guided Electives (see list below)[2]			6
	Total Credits		**29**
Senior			
NR 300	Biological Diversity		3
NR 310	Ecosystem Services and Human Well-Being		3
NRRT 400	Environmental Governance		3
NRRT 402	Cultural and Political Ecology	4A	3
NRRT 463	Non-Profit Administration in Conservation		3
NRRT 475	Leadership for Conservation Action	4B,4C	3
NRRT 487	Internship		5
Guided Electives (see list below)[2]			6
	Total Credits		**29**
	Program Total Credits:		**120**

Human Dimensions of Natural Resources Guided Electives [3]

Code	Title	AUCC	Credits
LOWER-DIVISION			
AREC 240/ECON 240	Economics of Environmental Sustainability (GT-SS1)	3C	3
BZ 223	Plant Identification		3
ESS 211	Foundations in Ecosystem Science		3
FW 104	Wildlife Ecology and Conservation (GT-SC2)	3A	3
FW 204	Introduction to Fishery Biology		3
FW 260	Principles of Wildlife Management		3
HORT 100	Horticultural Science	3A	4
NR 120A	Environmental Conservation (GT-SC2)	3A	3
NR 130	Global Environmental Systems (GT-SC2)	3A	3
SOC 220	Environment, Food, and Social Justice (GT-SS3)	1C	3
WR 204/GR 204	Sustainable Watersheds (GT-SC2)	3A	3
UPPER-DIVISION			
ANTH 330	Human Ecology		3
ANTH 370	Primates		3
ANTH 453	Impacts on Ancient Environments		3
ANTH 478/HIST 478	Heritage Resource Management		3
ANTH 479/IE 479	International Development Theory and Practice		3
AREC 340/ECON 340	Introduction-Economics of Natural Resources		3
AREC 346/ECON 346	Economics of Outdoor Recreation		3
ATS 350	Introduction to Weather and Climate		2
ESS 311	Ecosystem Ecology		3
ESS 353	Global Change Impacts, Adaptation, Mitigation		3
F 310/RS 310	Forest and Rangeland Ecogeography		3
F 311	Forest Ecology		3
GR 311	GIS for Social Scientists		3
GR 420	Spatial Analysis with GIS		4
NR 322	Intro. to Geographic Information Systems		4
NRRT 320	International Issues-Recreation and Tourism		3
PHIL 345	Environmental Ethics		3
POLS 361	U.S. Environmental Politics and Policy		3
POLS 362	Global Environmental Politics		3
RS 300	Rangeland Conservation and Stewardship		3
SOC 320	Population-Natural Resources and Environment		3
SOC 322	Environmental Justice		3
SOC 364	Food, Agriculture and Global Society		3

[1] Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).

[2] Select four upper-division (300- to 400-level) courses, two in the junior year and two in the senior year, for a minimum total of 12 credits from the Guided Electives department list.

[3] Students may petition to substitute courses not on the Guided Electives department list with approval of advisor.

Major Completion Map

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)		X	1A	3
MATH 117	College Algebra in Context I (GT-MA1)	X		1B	1
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	1
MATH 124	Logarithmic and Exponential Functions (GT-MA1)		X	1B	1
NRRT 193	New to the Major Seminar		X		1
Select 4 credits from the following groups:		X			4
Group A					
BZ 110	Principles of Animal Biology (GT-SC2)			3A	
BZ 111	Animal Biology Laboratory (GT-SC1)			3A	
Group B					
BZ 120	Principles of Plant Biology (GT-SC1)			3A	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
	Total Credits				**14**

Semester 2		Critical	Recommended	AUCC	Credits
SPCM 200	Public Speaking				3
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Biological and Physical Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#biological-physical-sciences)				3A	3
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
Elective					3
BZ 110/BZ 111 or BZ 120, CO 150, and MATH 124 must be completed by the end of Semester 2.		X			
	Total Credits				**15**

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
LAND 220/ LIFE 220	**Fundamentals of Ecology (GT-SC2)**	**X**		**3A**	**3**
NRRT 231	Principles-Parks/Protected Area Management	X			3
NRRT 262	Principles of Environmental Communication	X			3
Guided Natural Resources Elective (See list on Major Requirements Tab)					3
Elective					2
	Total Credits				**14**

Semester 4		Critical	Recommended	AUCC	Credits
STAT 201	General Statistics (GT-MA1)	X		1B	3
Select one course from the following:			X		3
CO 300	Writing Arguments (GT-CO3)			2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)			2	
JTC 300	Strategic Writing and Communication (GT-CO3)			2	
1C (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)				1C	3

Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)				3D	3
Elective					2
SPCM 200 must be completed by the end of Semester 4.		X			
	Total Credits				**14**
Semester 5		**Critical**	**Recommended**	**AUCC**	**Credits**
Select one course from the following:		X			5
NR 220	Natural Resource Ecology and Measurements				
NR 382A					
NR 382B					
	Total Credits				**5**
Junior					
Semester 6		**Critical**	**Recommended**	**AUCC**	**Credits**
NR 320	Natural Resources History and Policy		X		3
NR 377	Pre-Internship	X			1
NRRT 330	Social Aspects of Natural Resource Management	X			3
NRRT 376	Human Dimensions Research and Analysis		X		3
Guided Natural Resources Elective (See list on Major Requirements Tab)					3
	Total Credits				**13**
Semester 7		**Critical**	**Recommended**	**AUCC**	**Credits**
NR 319	Introduction to Geospatial Science		X		4
NR 400	Public Communication in Natural Resources		X		3
NRRT 340	Principles in Conservation Planning and Mgmt	X			3
NRRT 362	Environmental Conflict Management		X		3
Guided Natural Resources Elective (See list on Major Requirements Tab)					3
	Total Credits				**16**
Senior					
Semester 8		**Critical**	**Recommended**	**AUCC**	**Credits**
NR 300	Biological Diversity		X		3
NRRT 400	Environmental Governance	X			3
NRRT 463	Non-Profit Administration in Conservation		X		3
Guided Natural Resources Electives (See list on Major Requirements Tab)					6
	Total Credits				**15**
Semester 9		**Critical**	**Recommended**	**AUCC**	**Credits**
NR 310	Ecosystem Services and Human Well-Being	X			3
NRRT 402	Cultural and Political Ecology	X		4A	3
NRRT 475	Leadership for Conservation Action	X		4B,4C	3
NRRT 487	Internship	X			5
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.		X			
	Total Credits				**14**
	Program Total Credits:				**120**