

WARNER COLLEGE OF NATURAL RESOURCES COLORADO STATE UNIVERSITY

MAJOR IN ECOSYSTEM SCIENCE AND SUSTAINABILITY Fall 2023

Check or list course sub		YEAR 1	Offered	Sequenced Prerequisites	# of credits	AUCC Category			
Required courses for Year 1:									
		Intro to Ecosystem and Watershed							
	ESS 120	Sciences	F		1				
		Information Management for							
	ESS 129	Sustainability	F		1				
		Intro to Systems Theory for							
	ESS 130	Sustainability	S	ESS 129	1				

AUCC Cate	gory 1A Intermedia	te Writing – Suggested completion of	during Yea	r 1		
	CO 150	College Composition	F, S, SS	Test or scores or CO 130	3	1A

Biology Sele	Biology Selection – Choose one set (either LIFE or BZ) from the following:									
		Attributes of Living Systems	F, S, SS		4	3A				
	LIFE 102 and LIFE 103	Biology of Organisms-Animals and Plants	F, S, SS		4					
	BZ 110/111 and	Principles of Animal Biology/Lab	F, S, SS	BZ 111 lab: BZ 110 or concurrent registration	4	3A				
	BZ 110/111 and BZ 120	Principles of Plant Biology	F, S, SS		4	3A				

Ch	Chemistry Selection – Choose one lecture and lab from the following:								
					MATH 117 or test placement; Lab: CHEM 107 or concurrent				
		CHEM 107/108	Fundamentals of Chemistry/Lab	F, S, SS	registration	5	3A		
					MATH 118 or test placement;				
					Lab: CHEM 111 or concurrent				
		CHEM 111/112	General Chemistry I/Lab	F, S, SS	registration	5	3A		

Calculus I S	Calculus I Selection – Choose one course from the following:								
		Calculus for Biological Scientists		MATH 117, MATH 118,					
	MATH 155	Ι	F, S, SS	MATH 124, MATH 125	4	1B			
				MATH 117, MATH 118,					
	MATH 160	Calculus for Physical Scientists I	F, S, SS	MATH 124, MATH 126	4	1B			

Environmen	Environmental Science Selection – Choose one course from the following:								
		Feeding the World in a Changing							
	AB 111	Climate	F, S		3	3A			
		Science of Global Climate							
	ATS 150	Change	F, S		3				
		Foundations of Environmental							
	GES 101	Sustainability	F		3				
	NR 120 (A or B)	Environmental Conservation	F, S	Freshman only	3-4	3A			

Social/Behavioral Science Selection – Choose one course from the following:								
AREC 2 ECON 2 AREC/I	100: Intro. Cultural Anthropology 202: Ag & Resource Economics 202: Microeconomics ECON 240: Issues in Environ. Econ. 204: Macroeconomics	POLS 101: American Gov't POLS 103: State/Local Gov't SOC 100: Intro to Sociology SOC 105: Social Problems	3	3C				

Check or list course sub		YEAR 2	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required co	ourses for Year 2:					
	ESS/GR 210	Physical Geography	F		3	
				LIFE 102 or BZ 110/111 or		
	LIFE 320	Ecology	F, S	BZ 120; MATH 155 or 160	3	

Physics Selection – Choose one course from the following:								
				MATH 125 or concurrent				
	PH 121	General Physics I	F, S, SS	registration	5	3A		
		Physics for Scientists and		MATH 126; MATH 155 or				
	PH 141	Engineers	F, S, SS	160 or concurrent reg.	5	3A		

Statistics Selection – Choose one course from the following:								
		Intro to Applied Statistical						
	STAT 301	Methods	F, S, SS	MATH 117 or higher	3			
	STAT 307	Introduction to Biostatistics	F, S, SS	MATH 117 or higher	3			

Check or list course sub		YEAR 3	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required co	ourses for Year 3:					
	ESS 311	Ecosystem Ecology	F	PH 121 or 141; LIFE 320	3	
	ESS 312	Sustainability Science	S	LIFE 320	3	
	ESS 320	Internship and Career Prep	S	LIFE 320	1	
				MATH 155 or 160; STAT		
				301 or 307; ESS 211 or		
	ESS 330	Quantitative Reasoning	S	LIFE 320	3	
	WR/GR 204	Sustainable Watersheds	F, S		3	3A
	NR 319	Intro to Geospatial Science	F, S		4	

Advanced W	Advanced Writing Selection – Choose one course from the following:								
		Writing in the Disciplines –							
	CO 301 B or C	Sciences or Social Sciences	F, S, SS	CO 150 or HONR 193	3	2			
		Strategic Writing &							
	JTC 300	Communications	F, S, SS	CO 150 or HONR 193	3	2			
		Specialized Professional							
	LB 300	Writing	F, S, SS	CO 150 or HONR 193	3	2			

Check or list course sub		YEAR 4	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required co	ourses for Year 4:					
	NR 400	Public Communication in NR	F, S, SS	Advanced Writing	3	
		Practicing Sustainability		ESS 311 and 312; WCNR		
	ESS 440	(Capstone course)	S	senior standing	4	4C
ESS Major	Electives – Must tak	e 12 credits total				
	ESS Prefix					
	Technical Elective					
	ESS Electives from Elective List					

Choose one course from the following:							
			Global Perspectives on				
		ESS 400	Sustainability	S	ESS 311	3	4A, 4B
		ESS 411	Earth Systems Ecology	F	ESS 311 and 312	3	4A, 4B

Check or list course sub	PROFESSIONAL DEVELOPMENT AND ENGAGEMENT REQUIREMENT Select one option from the following to be planned in consultation with advisor				
	NR 220	Natural Resource Ecology & Measurements	SS	BZ 120 or similar, MATH 118	5
	ESS 487 or 495	Internship or Independent Study	F, S, SS	ESS 320	5
	ESS 220 ESS 221 ESS 298	ESS SUPER Program: Research Skills, Methods, and Placement	F/S		5
	Department-Approved Study Abroad Program				

Check or list course sub	OTHER REQUIRED COURSEWORK – To be completed at any time in major program		AUCC Category
	Diversity, Equity, and Inclusion	3	1C
	Arts and Humanities	3	3B
	Arts and Humanities	3	3B
	Historical Perspectives	3	3D
	Open Electives – Non-directed electives of students' choice; can be used toward a minor	17-18	

* ESS Major Electives – Choose from the list published as CSU Ecosystem Science and Sustainability (ESS) – Major Elective Options, available from the ESS Department Academic Success Coordinators or online at: <u>https://warnercnr.colostate.edu/ess/ess-undergraduate-degree-tracks/ess-undergraduate-program-curriculum-course-offerings/</u>.

** Course sequencing for Honors students has additional considerations in relation to AUCC requirements. Honors students should consult their ESS Department advisor to ensure they track AUCC and Honors requirements correctly.