



MAJOR IN ECOSYSTEM SCIENCE AND SUSTAINABILITY

Check or list course sub	YEAR 1		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Computer Selection – Choose one course from the following:						
_____	CS 110	Personal Computing	F, S, SS		4	
_____	BUS 150	Business Computing Concepts and Applications	F, S, SS		3	

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

AUCC Category 1A Intermediate Writing – Suggested completion during Year 1						
_____	CO 150	College Composition	F, S, SS	Test or scores or CO 130	3	1A

Chemistry Selection – Choose one lecture and lab from the following:						
_____	CHEM 107/108	Fundamentals of Chemistry/Lab	F, S, SS	MATH 117 or test placement; Lab: CHEM 107 or concurrent registration	5	3A
	CHEM 111/112	General Chemistry I/Lab	F, S, SS	MATH 118 or test placement; satisfactory completion of Chem Prep/ALEKS <u>OR</u> CHEM 105. Lab: CHEM 111 or concurrent registration	5	3A

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

Environmental Science Selection – Choose one course from the following:						
_____	GES 101	Foundations of Environmental Sustainability	F, S		3	
	NR 120	Environmental Conservation	F, S	Freshman only	3	3A

Required course for Year 1:						
_____	ESS 130	System Theory and Information Management	S	CS 110 or BUS 150	1	

Social/Behavioral Science Selection – Choose one course from the following:						
_____	AREC/ECON 202	Ag & Resource Economics/Principles of Microeconomics	F, S	MATH 117 or higher, or concurrent registration	3	3C
	POLS 103	State/Local Government and Politics	F, S		3	3C
	ANTH 100	Anthropology	F, S		3	3C

Check or list course sub	YEAR 2		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required courses for Year 2:						
_____	ESS/GR 210	Physical Geography	F		3	
_____	NRRT 262	Principles of Environmental Communication	F		3	
_____	ESS 211	Foundations in Ecosystem Science	S	ESS/GR 210	3	

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

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

Geology/Soils Selection – Choose one course from the following:						
_____	GEOL 120	Physical Geology	F, S, SS		3	3A
_____	GEOL 122	Geology of Our Environment	F, S, SS		3	3A
_____	GEOL 124	Geology of Natural Resources	S		3	3A
_____	SOCR 240	Introduction to Soil Science	F, S	CHEM 107 or 111	4	

Global/Cultural Awareness Selection – Choose one course from the following:						
_____	POLS 232	International Relations	F, S		3	3E
_____	ANTH 200	Cultures and the Global System	F, S		3	3E
_____	HORT/SOCR 171	Environmental Issues in Agriculture	F		3	3E
_____	IE/AGRI 270	World Interdependence – Population and Food	S		3	3E

Check or list course sub	YEAR 3		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required courses for Year 3:						
_____	ESS 311	Ecosystem Ecology	F	ESS 211	3	
_____	ESS 330	Quantitative Reasoning	S	MATH 155 or 160; STAT 301 or 307; ESS 211	3	
_____	WR/GR 304	Sustainable Watersheds	F, S	AUCC 1B Mathematics	3	3A
_____	NRRT 330	Social Aspects of Natural Resource Management	F, S	Junior/Senior standing	3	
_____	ESS Course Selection**				3	

Spatial Information Selection – Choose one course from the following:						
_____	NR 322	Introduction to GIS	F, S		4	
_____	GR 420	Spatial Analysis with GIS	F	3 credits of GR	4	

Advanced Writing Selection – Choose one course from the following:						
_____	CO 301 B or C	Writing in the Disciplines – Sciences or Social Sciences	F, S, SS	Junior/Senior standing, CO 150 or HONR 193	3	2
_____	JTC 300	Professional Technical Communication	F, S, SS	Junior/Senior standing, CO 150 or HONR 193	3	2
_____	LB 300	Specialized Professional Writing	F, S, SS	Junior/Senior standing, CO 150 or HONR 193	3	2

Check or list course sub	YEAR 4		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required courses for Year 4:						
_____	GR/NR 323	Remote Sensing of Natural Resources	F		3	
_____	ESS 411	Earth Systems Ecology	F	ESS 311	3	4
_____	ESS 486	Ecosystem Practicum	F, S*	NR 220; ESS 311	2	
_____	ESS 400	Sustainability and Ecosystem Science	S	ESS 311 and 330	3	4
_____	ESS 440	Practicing Sustainability (Capstone course)	S	ESS 311 and 330	4	4
_____	ESS Course Selection**				6	

MOUNTAIN CAMPUS SUMMER FIELD PROGRAM – Recommended summer between Year 2 and Year 3						
_____	NR 220	Natural Resource Ecology & Measurements	SS	BZ 120 or similar, MATH 118	5	

Check or list course sub	OTHER REQUIRED COURSEWORK – To be completed at any time in major program				# of credits	AUCC Category
_____	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				8-9	

* May have spring semester offering – Check with ESS Academic Success Coordinators or your advisor on course availability.

** ESS Course Selection – Choose from the list of approved courses selected for ESS students. Please see the ESS Department website or check with your ESS Academic Success Coordinator or Faculty Mentor for the most up-to-date course list.