



# MAJOR IN WATERSHED SCIENCE

Check or list course sub	YEAR 1		Offered	Sequenced Prerequisites	# of credits	AUCC Category
<b>Biology Selection – Choose one course from the following:</b>						
_____	LIFE 103	Biology of Organisms-Animals and Plants	F, S, SS	LIFE 102	4	
	BZ 110/111	Principles of Animal Biology/Lab	F, S, SS	BZ 111: BZ 110 or concurrent registration	4	3A
	BZ 120	Principles of Plant Biology	F, S		4	3A

<b>Geology Selection – Choose one course from the following:</b>						
_____	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
	GEOL 150	Physical Geology for Scientists and Engineers	F		4	

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

<b>Computer Selection – Choose one course from the following:</b>						
_____	CS 110	Personal Computing	F, S, SS		4	
	BUS 150	Business Computing Concepts/Applications	F, S, SS		3	

<b>Chemistry Selection – Choose one lecture and lab from the following:</b>						
_____	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

<b>Calculus I Selection – Choose one course from the following:</b>						
_____	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

<b>Required Watershed Science course for Spring semester:</b>						
_____	ESS 130	System Theory and Information Management	S	CS 110 or BUS 150	1	

Check or list course sub	YEAR 2		Offered	Sequenced Prerequisites	# of credits	AUCC Category
<b>Required courses for Year 2:</b>						
_____	ESS/GR 210	Physical Geography	F		3	
_____	NR 322	Introduction to GIS	F, S		4	
_____	SOCR 240	Introduction to Soil Science	F, S	CHEM 107 or 111	4	
_____	WR/GR 304	Sustainable Watersheds	F, S	AUCC 1B Mathematics	3	3A

<b>Calculus II Selection – Choose one course from the following:</b>						
_____	MATH 255	Calculus for Biological Scientists II	F, S	MATH 126 or concurrent reg.; MATH 155	4	1B
_____	MATH 161	Calculus for Physical Scientists II	F, S, SS	MATH 124; MATH 160	4	1B

<b>Ecology Selection – Choose one course from the following:</b>						
_____	ESS 211	Foundations in Ecosystem Science	S	ESS/GR 210	3	
_____	LIFE 320	Ecology	F, S	BZ 101 or 104 or 110 or 120 or LIFE 102; MATH 141 or 155 or 160	3	

<b>Physics Selection – Choose one course from the following:</b>						
_____	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

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

Check or list course sub	YEAR 3		Offered	Sequenced Prerequisites	# of credits	AUCC Category
<b>Required courses for Year 3:</b>						
_____	SOCR 470	Soil Physics	F	SOCR 240	3	
_____	SOCR 471	Soil Physics Laboratory	F	SOCR 470 or concurrent registration	1	
_____	AREC 342	Water Law, Policy, and Institutions	S		3	
_____	ESS 330	Quantitative Reasoning	S	MATH 155 or 160; STAT 301 or 307; ESS 211	3	
_____	WR 418	Land Use and Water Quality	S	Any Chemistry class with lab	3	
_____	WR 419	Water Quality Lab	S	Concurrent reg. in WR 418	2	
_____	Watershed Course Selection*				3	

<b>Statistics Selection – Choose one course from the following:</b>						
_____	STAT 301	Intro to Statistical Methods	F, S, SS	MATH 117 or higher	3	
_____	STAT 315	Statistics for Engineers and Scientists	F, S, SS	MATH 161 or 255	3	

Check or list course sub	YEAR 4		Offered	Sequenced Prerequisites	# of credits	AUCC Category
<b>Required courses for Year 4:</b>						
_____	WR 416	Land Use Hydrology	F	SOCR 240 or Geology; Statistics; Physics	3	4
_____	WR 417	Watershed Measurements	F	Concurrent reg. in WR 416	3	
_____	WR 486	Watershed Practicum	F	Concurrent reg. in 416/417	2	
_____	WR 440	Watershed Problem Analysis (Capstone course)	S	NR 322 or NR 319; WR 416; WR 418	3	4
_____	Watershed Course Selection*				6	

<b>Snow/Climate Selection – Choose one course from the following:</b>						
_____	WR 474	Snow Hydrology	F		3	
_____	SOCR 322	Principles of Microclimatology	S	3 credits of Physics	3	

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

Check or list course sub	<b>OTHER REQUIRED COURSEWORK – To be completed at any time in major program</b>					AUCC Category
_____	Arts and Humanities				3	3B
_____	Arts and Humanities				3	3B
_____	Social and Behavioral Sciences				3	3C
_____	Historical Perspectives				3	3D
_____	Global and Cultural Awareness				3	3E
_____	Open Electives – Non-directed electives of students' choice; can be used toward a minor				5-7	

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