



**MAJOR IN
WATERSHED
SCIENCE
HONORS TRACK 2**
Effective Fall 2018

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

AUCC Category 1A Intermediate Writing – Suggested completion during Year 1						

Biology Selection – Choose one course from the following:						
_____	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

Geology 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
_____	GEOL 150	Physical Geology for Scientists and Engineers	F		4	

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

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	
_____	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
_____	LIFE 320†	Ecology (Honors sections available)	F, S	LIFE 102 or BZ 110/111 or BZ 120; MATH 155 or 160	3	

Calculus II Selection – Choose one course from the following:						
_____	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

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	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 3		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required courses for Year 3:						
_____	SOCR 470	Soil Physics	F	SOCR 240	3	
_____	SOCR 471	Soil Physics Laboratory	F	SOCR 470 or concurrent registration	1	
_____	ESS 320	Internship and Career Prep	F, S	LIFE 320	1	
_____	ESS 330	Quantitative Reasoning	S	MATH 155 or 160; STAT 301 or 307; ESS 211 or LIFE 320	3	
_____	AREC 342	Water Law, Policy, and Institutions	S		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	

Advanced Writing Selection – Choose one course from the following:						
_____	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 4		Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required courses for Year 4:						
_____	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 Technical Electives*				9	

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

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					AUCC Category
_____	Arts and Humanities – Can be met by HONR 292B				3	3B
_____	Arts and Humanities				3	3B
_____	Social and Behavioral Sciences				3	3C
_____	Historical Perspectives				3	3D
_____	Global and Cultural Awareness – Can be met by HONR 292C				3	3E
_____	Open Electives – Non-directed electives of students' choice; can be used toward a minor				5-7	

* Watershed Technical Electives – 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 up-to-date course list.

Check or list course sub	HONORS CURRICULUM – TRACK 2^					AUCC Category
Choose one course during Year 2:						
_____	HONR 292A	Honors Seminar – Knowing in the Sciences	F, S		3	3A
_____	HONR 292B	Honors Seminar – Knowing in Arts and Humanities	F, S		3	3B
_____	HONR 292C	Honors Seminar – Knowing Across Cultures	F, S		3	3E
✓	15 credits within major at Honors level					
_____	HONR 399	Honors Pre-Thesis	F, S		1	
_____	HONR 499	Honors Thesis	F, S	HONR 399	3	

Honors Coursework in Major:

† Pre-Approved options for one 200/300-level Honors course within major.

†† WR/GR 304 (3 credits) is required. For additional 9 credits, options include 400-level WR courses at Honors level, independent study, and graduate coursework.

^ Students entering the Honors Program **after first semester of freshman year** will take an additional Honors-level course (in any discipline) from 100-400 level to substitute for the Honors freshman seminar, in addition to the 15 credits within the major.