

## MAJOR IN WATERSHED SCIENCE & SUSTAINABILITY

Concentration: Watershed Sustainability

Check or list course sub		YEAR 1	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required co	urses for Year 1:					
	ESS 120	Intro to Ecosystem and Watershed Sciences	F		1	
	ESS 129	Information Management for Sustainability	F		1	
	CHEM 103	Chemistry in Context	F, S, SS		3	3A
	GES 120	Water Sustainability in the Western US	F		3	
	WR/GR 204	Sustainable Watersheds	F, S		3	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	

Biology Selection – Choose one course from the following:							
		Principles of Animal		BZ 111: BZ 110 or			
	BZ 110/111	Biology/Lab	F, S, SS	concurrent registration	4	3A	
	BZ 120	Principles of Plant Biology	F, S, SS		4	3A	

Geology/Geo	Geology/Geography Selection – Choose one course from the following:							
		Intro to Geology-Parks and						
	GEOL 110	Monuments	F, S, SS		3	3A		
	GEOL 120	Physical Geology	F, S, SS		3	3A		
		The Blue Planet: Geology of						
	GEOL 122	Our Environment	F, S		3	3A		
		Geology of Natural						
	GEOL 124	Resources	S		3	3A		
		Physical Geology for						
	GEOL 150	Scientists and Engineers	F		4			
	GR/ESS 210	Physical Geography	F		3			

Check or list course sub		YEAR 2	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required cour	ses for Year 2:					
		Science of Global Climate				
	ATS 150	Change	F, S		3	
				BZ 110 or 120 or LIFE 102; MATH 141 or 155 or		
	LIFE 320	Ecology	F, S	160	3	
	PH 110	Physics of Everyday Phenomena	F, S		3	3A
	AREC 342	Water Law, Policy, and Institutions	S		3	
	STAT 158	Intro. to R Programming	S, SS		1	

MATH 141   Calculus in Management   F, S, SS   MATH 117, MATH 118   3   18	Calculus Scice	tion – Choose (	one course from the following:				
MATH 1155			Calculus in Management				
MATH 1155   Scientists   F, S, SS   MATH 124, MATH 125   4   1B		MATH 141	Sciences	F, S, SS	MATH 117, MATH 118	3	1B
Statistics Selection - Choose one course from the following:			Calculus for Biological		MATH 117, MATH 118,		
MATH 160   Scientists I   F, S, SS   MATH 124, MATH 126   4   1B	<del></del>	MATH 155		F, S, SS	MATH 124, MATH 125	4	1B
MATH 160   Scientists I   F, S, SS   MATH 124, MATH 126   4   1B			Calculus for Physical		MATH 117, MATH 118,		
STAT 301		MATH 160		F, S, SS	MATH 124, MATH 126	4	1B
STAT 301							
STAT 301	Statistics Selec	ction – Choose	one course from the following:				
STAT 301   Methods   F, S, SS   MATH 117 or higher   3							
STAT 315		STAT 301		F, S, SS	MATH 117 or higher	3	
STAT 315   Statistics			Intro to Theory and Practice of				
Sociology Selection - Choose one course from the following:   SOC 100		STAT 315		F, S, SS	MATH 160 or 155	3	
SOC 100		•				•	•
SOC 100	Sociology Sele	ction – Choose	one course from the following:				
SOC 105   Social Problems   F, S, SS   3   3C				F S SS		3	3C
Agricultural and Resource   F, S   MATH 117 (may be taken concurrently) or higher   3   3C							
AREC 202		SOC 105	Social Problems	F, S, SS		3	3C
AREC 202							
AREC 202   Economics   F, S   Concurrently) or higher   3   3C	<b>Economics Sel</b>	lection – Choos					
ECON 202   Principles of Microeconomics   F, S, SS   MATH 117 (may be taken concurrently) or higher   3   3C							
Check or list course sub		AREC 202	Economics	F, S	concurrently) or higher	3	3C
Check or list course sub  Required courses for Year 3:    NR 319					MATH 117 (may be taken		
course sub         YEAR 3         Offered         Sequenced Prerequisites         credits         Category           Required courses for Year 3:           NR 319         Introduction to Geospatial Science         F, S         4         4           NR 319         Science         F, S         SOCR 240 or Geology; Statistics; Physics         3         4           WR 416         Land Use Hydrology         F         Statistics; Physics         3         4           WR 486         Watershed Field Practicum         F         Junior standing         2         3           ESS 312         Sustainability Science         S         LIFE 320         3         3           WR 418         Land Use and Water Quality         S         Any Chemistry class with lab; Statistics; STAT 158         3           Advanced Writing Selection - Choose one course from the following:           CO 301B         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           Natural Resources Selection - Choose one course from the following:           Ecosystem Services and Human Well-Being         AREC or ECON 202 or LIFE 220 </td <td></td> <td>ECON 202</td> <td>Principles of Microeconomics</td> <td>F, S, SS</td> <td>concurrently) or higher</td> <td>3</td> <td>3C</td>		ECON 202	Principles of Microeconomics	F, S, SS	concurrently) or higher	3	3C
NR 319							
NR 319			YEAR 3	Offered	Sequenced Prerequisites		
NR 319	course sub	rses for Year 3:		Offered	Sequenced Prerequisites		
WR 416	course sub	rses for Year 3:		Offered	Sequenced Prerequisites		
WR 416	course sub		Introduction to Geospatial		Sequenced Prerequisites	credits	
WR 486   Watershed Field Practicum   F   Junior standing   2	course sub		Introduction to Geospatial			credits	
ESS 312   Sustainability Science   S   LIFE 320   3	course sub	NR 319	Introduction to Geospatial Science	F, S	SOCR 240 or Geology;	credits 4	Category
WR 418	course sub	NR 319 WR 416	Introduction to Geospatial Science Land Use Hydrology	F, S	SOCR 240 or Geology; Statistics; Physics	credits  4  3	Category
WR 418	course sub	NR 319 WR 416 WR 486	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum	F, S F F	SOCR 240 or Geology; Statistics; Physics Junior standing	4 3 2	Category
CO 301B   Sciences   F, S, SS   CO 150 or HONR 193   3   2	course sub	NR 319 WR 416 WR 486	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum	F, S F F	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320	4 3 2	Category
CO 301B   Sciences   F, S, SS   CO 150 or HONR 193   3   2	course sub	NR 319 WR 416 WR 486 ESS 312	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science	F, S F F S	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with	4 3 2 3	Category
CO 301B   Sciences   F, S, SS   CO 150 or HONR 193   3   2	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality	F, S F F S	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with	4 3 2 3	Category
Strategic Writing & Communications F, S, SS CO 150 or HONR 193 3 2  Specialized Professional Writing F, S, SS CO 150 or HONR 193 3 2  Natural Resources Selection - Choose one course from the following:    Ecosystem Services and Human Well-Being F LAND 220 or LIFE 220 3   Natural Resources History and   Natural Resources History   Natural Resources   Natural Resources   Natural Resources   Natura	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll	F, S F F S	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with	4 3 2 3	Category
Description   Text	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection -	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines-	F, S F S S	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158	4 3 2 3 3	Category 4
LB 300   Specialized Professional   Writing   F, S, SS   CO 150 or HONR 193   3   2	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection -	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences	F, S F S S	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158	4 3 2 3 3	Category 4
LB 300   Writing   F, S, SS   CO 150 or HONR 193   3   2	course sub Required cour	WR 416 WR 486 ESS 312 WR 418  iting Selection -	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing &	F, S  F F S S S owing:	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158	4 3 2 3 3 3	4 2
Natural Resources Selection - Choose one course from the following:    Ecosystem Services and   AREC or ECON 202 or   LAND 220 or LIFE 220   3     Natural Resources History and   Natural Res	course sub Required cour	WR 416 WR 486 ESS 312 WR 418  iting Selection -	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications	F, S  F F S S S owing:	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158	4 3 2 3 3 3	4 2
NR 310 Ecosystem Services and Human Well-Being F LAND 220 or LIFE 220 3  Natural Resources History and	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection  CO 301B  JTC 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional	F, S  F F S S owing: F, S, SS F, S, SS	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193	4  3 2 3 3 3	4 2 2
NR 310 Ecosystem Services and Human Well-Being F LAND 220 or LIFE 220 3  Natural Resources History and	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection  CO 301B  JTC 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional	F, S  F F S S owing: F, S, SS F, S, SS	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193	4  3 2 3 3 3	4 2 2
NR 310 Human Well-Being F LAND 220 or LIFE 220 3  Natural Resources History and	course sub Required cour	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection  CO 301B  JTC 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional	F, S  F F S S owing: F, S, SS F, S, SS	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193	4  3 2 3 3 3	4 2 2
Natural Resources History and	Advanced Wr	NR 319  WR 416  WR 486  ESS 312  WR 418  iting Selection  CO 301B  JTC 300  LB 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional Writing  - Choose one course from the foll	F, S  F F S S owing: F, S, SS F, S, SS	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193  CO 150 or HONR 193	4  3 2 3 3 3	4 2 2
	Advanced Wr	WR 416 WR 486 ESS 312 WR 418 iting Selection CO 301B JTC 300 LB 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional Writing  - Choose one course from the foll Ecosystem Services and	F, S  F F S S S  owing: F, S, SS F, S, SS  owing:	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193  CO 150 or HONR 193	3 2 3 3 3 3 3 3	4 2 2
NR 320 Policy F, S, SS Junior standing 3	Advanced Wr	WR 416 WR 486 ESS 312 WR 418 iting Selection CO 301B JTC 300 LB 300	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional Writing  - Choose one course from the foll Ecosystem Services and Human Well-Being	F, S  F F S S S  owing: F, S, SS F, S, SS  owing:	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193  CO 150 or HONR 193	3 2 3 3 3 3 3 3	4 2 2
	Advanced Wr	WR 416 WR 486 ESS 312 WR 418  iting Selection - CO 301B  JTC 300 LB 300  LB 300  NR 310	Introduction to Geospatial Science  Land Use Hydrology Watershed Field Practicum Sustainability Science  Land Use and Water Quality  - Choose one course from the foll Writing in the Disciplines- Sciences Strategic Writing & Communications Specialized Professional Writing  - Choose one course from the foll Ecosystem Services and Human Well-Being Natural Resources History and	F, S  F F S S S  owing: F, S, SS F, S, SS  owing: F	SOCR 240 or Geology; Statistics; Physics Junior standing LIFE 320 Any Chemistry class with lab; Statistics; STAT 158  CO 150 or HONR 193  CO 150 or HONR 193  CO 150 or HONR 193  AREC or ECON 202 or LAND 220 or LIFE 220	3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 2 2

Check or list course sub		YEAR 4	Offered	Sequenced Prerequisites	# of credits	AUCC Category
Required cour	Required courses for Year 4:					
		Watershed Problem Analysis		NR 319; WR 416 and WR		
	WR 440	(Capstone course)	S	418	3	4
	Watershed Technical Electives*					
	Sustainability I	Electives**			9	

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
	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	14-16	

<sup>\*</sup> Watershed Technical Electives – Choose from the list of approved courses selected for Watershed Science and Sustainability 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.

<sup>\*\*</sup> Sustainability Electives – Choose from the list of approved courses selected for students in the Watershed Sustainability concentration. 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.