MAJOR IN WATERSHED SCIENCE AND SUSTAINABILITY, WATERSHED SCIENCE CONCENTRATION

courses (MATH 117, MATH 118, MATH 124, MATH 125, MATH 126) prior to the courses listed in this plan.

Major Completion Map

<u>Distinctive Requirements for Degree Program</u>: This program assumes that students will either test out of or take the prerequisite Mathematics

Freshman					
Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)	X		1A	3
ESS 120	Intro to Ecosystem and Watershed Sciences	X			1
ESS 129	Information Management for Sustainability	X			1
WR 204/GR 204	Sustainable Watersheds (GT-SC2)	X		3A	3
Select one group	from the following:	X			5
Group A					
CHEM 107	Fundamentals of Chemistry (GT-SC2)			3A	
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)			3A	
Group B					
CHEM 111	General Chemistry I (GT-SC2)			3A	
CHEM 112	General Chemistry Lab I (GT-SC1)			3A	
	Total Credits				13
Semester 2		Critical	Recommended	AUCC	Credits
STAT 158	Introduction to R Programming	X			1
Select one course from the following:					3-4
ESS 210/	Physical Geography				
GR 210					
GEOL 110	Introduction to Geology-Parks and Monuments (GT-SC2)			3A	
GEOL 120	Exploring Earth - Physical Geology (GT-SC2)			3A	
GEOL 122	The Blue Planet - Geology of Our Environment (GT-SC2)			3A	
GEOL 124	Geology of Natural Resources (GT-SC2)			3A	
GEOL 150	Physical Geology for Scientists and Engineers			3A	
Select 4 credits from the following:		Х			4
BZ 120	Principles of Plant Biology (GT-SC1)			3A	
BZ 110 & BZ 111	Principles of Animal Biology (GT-SC2)			3A	
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)		X		1C	3
-	vioral Sciences (http://catalog.colostate.edu/general-		X	3C	3
catalog/all-unive	rsity-core-curriculum/aucc/#social-behavioral-sciences)				
CO 150 requirem	ent must be completed by the end of Semester 2.	X			
	Total Credits				14-15
Sophomore					
Semester 3		Critical	Recommended	AUCC	Credits
MATH 155 or 160	Calculus for Biological Scientists I (GT-MA1) Calculus for Physical Scientists I (GT-MA1)	Х		1B	4
PH 121 or 141	General Physics I (GT-SC1) Physics for Scientists and Engineers I (GT-SC1)			3A	5
SOCR 240	Introductory Soil Science				4

Electives

Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-Χ 3B 3 university-core-curriculum/aucc/#arts-humanities) **Total Credits** 16 Critical Semester 4 Recommended **AUCC** Credits 3 **LIFE 320** Ecology MATH 161 or Calculus for Physical Scientists II (GT-MA1) Χ 1B 4 255 Calculus for Biological Scientists II General Physics II (GT-SC1) PH 122 or 142 Χ 3A 5 Physics for Scientists and Engineers II (GT-SC1) STAT 301 or 315 Introduction to Applied Statistical Methods Χ 3 Intro to Theory and Practice of Statistics WR 204/GR 204 must be completed by the end of Semester 4. Χ 15 **Total Credits** Critical Semester 5 Recommended **AUCC** Credits NR 220 5 Natural Resource Ecology and Measurements Χ 5 **Total Credits** Junior Critical Credits Semester 6 Recommended **AUCC** NR 322 Intro. to Geographic Information Systems Χ 4 WR 416 Land Use Hydrology Χ 3 4B Χ 3 Snow Hydrology WR 474 WR 486 Watershed Field Practicum Χ 2 3 Electives Χ **Total Credits** 15 AUCC Semester 7 Critical Recommended Credits **AREC 342** Water Law, Policy, and Institutions Χ 3 WR 418 Land Use and Water Quality Χ 3 Χ 3 Select one course from the following: CO 301B Writing in the Disciplines: Sciences (GT-CO3) 2 JTC 300 Strategic Writing and Communication (GT-CO3) 2 LB 300 Specialized Professional Writing 2 Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-Χ 3B 3 university-core-curriculum/aucc/#arts-humanities) Electives Χ 3 **Total Credits** 15 Senior Semester 8 Critical Recommended **AUCC** Credits WR 417 Watershed Measurements Χ 3 Select one from the following: Χ 4 **GEOL 452** Hydrogeology **SOCR 470** Soil Physics & SOCR 471 Select one course from the following: Χ 3 BZ 471 Stream Biology and Ecology ESS 474 Limnology Watershed Science Elective (See list on requirements tab.) Χ 3 **Total Credits** 13 Credits Critical **AUCC** Semester 9 Recommended WR 440 4A,4B,4C Watershed Problem Analysis Χ 3 Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-Χ 3D 3 university-core-curriculum/aucc/#historical-perspectives) Watershed Science Elective (See list on requirements tab.) Χ 3

Χ

4-5

The benchmark courses for the 9th semester are the remaining courses in the entire program of study.

Χ

Total Credits 13-14
Program Total Credits: 120