## Course offerings for WRE, WRPM, and WRS majors

Course	Course	Number of	Term offered				Cross
Number	Name	Credits	F	W	Sp	Su	listed
AEC 532	Environmental Law	4			Sp		
AEC 534	Environmental and Resource Economics	3			Sp*		
AEC 551	Applications of Environmental and Natural Resource Economics	4			Sp		
ANTH 585	Uses of Anthropology	4			Sp		
ANTH 591	Ethnographic Methods	4		W			
ATS 520	Climate Physics	4		W			
BEE 512	Physical Hydrology	3	F				
BEE 529	Biosystems Modeling	3		W			
BEE 533	Irrigation System Design	4		W			
BEE 542	Vadose Zone Transport	4	F				
BEE 546	River Engineering	4					
BEE 549	Regional Hydrologic Modeling	3		W			
BEE 558	Non-point Source Pollution Assessment and Control	3			Sp*		
BOT 516	Aquatic Botany	4	F				
BOT 517	Phycology	4				Su	
BOT 570	Community Structure and Analysis	4		W			
BOT 588	Environmental Physiology of Plants	3		W			
CE 511	Ocean Engineering	4		W			
CE 512	Hydrology	4	F		Sp		
CE 513	GIS in Water Resources	3		W			
CE 514	Groundwater Hydraulics	3		W			
CE 516	Stormwater Design and Management	4		W			
CE 517	Hydraulic Engineering Design	4		W			
CE 544	Open Channel Flow	3		W			
CE 630	Ocean Wave Mechanics I	3	F				OC 630
CE 631	Ocean Wave Mechanics II	3		W			OC 631
CHE 514	Fluid Flow	4		W			
COMM 540	Theories of Conflict and Conflict Management	3	F				
CS 513	Applied Machine Learning	3			Sp*		
CS 540	Database Management Systems	4		W			

Course Number	Course Name	Number of Credits		Cross			
			F	W	Sp	Su	listed
ECON 566	Economics of Traditional and Renewable Energy	3	F*	W			
ENVE 521	Drinking Water Treatment Processes	4	F				
ENVE 522	Wastewater Treatment Processes	4		W			
ENVE 531	Fate and Transport of Chemicals in Environmental Systems	4		W			
ENVE 532	Aquatic Chemistry: Natural and Engineered Systems	4	F				
ENVE 535	Physical & Chemical Treatment Processes	4			Sp		
ENVE 536	Aqueous Environmental Chemistry Laboratory	1	F				
ENVE 554	Groundwater Remediation	4	F		Sp		
ENVE 556	Sustainable Water Resources Development	3			Sp		
FE 536	Forest Disturbance Hydrology	4		W			
FES 521	Natural Resource Research Planning	3		W			
FES 523	Quantitative Analysis in Social Science	4			Sp		
FES 524	Natural Resources Data Analysis	4		W			
FES 525	Interdisciplinary Approaches to Socio-Ecological Problems	3	F				
FES 545	Ecological Restoration	4	F*	W*	Sp	Su*	
FES 560	Green Infrastructure	4		W			
FES 586	Public Lands Policy and Management	3	F	W*	Sp	Su*	
FES 699	Special Topics –Isotopics Journal Club	1		W			
FW 556	Freshwater Ecology and Conservation	5			Sp		
FW 579	Wetlands and Riparian Ecology	3	F*		Sp*		
FW 580	Stream Ecology	3	F	W*			
FW 620	Ecological Policy	3	F*		Sp*		
GEO 518	Geoscience Communication	3		W			
GEO 530	Geochemistry	4		W			
GEO 531	Environmental Geochemistry	4			Sp		
GEO 532	Applied Geomorphology	3			Sp		
GEOG 523	Snow Hydrology	3		W			
GEOG 524	Hydrology for Water Resource Management	3	F				
GEOG 540	Conflict, Cooperation and Control of Water in the United States	3		W	Sp*		
GEOG 541	The World's Water	3		W*			
GEOG 551	Planning Principles and Practices for Resilient Communities	3	F	W*			
GEOG 552	Environmental Assessment	3	F*	W	Sp		

Course Number	Course Name	Number of Credits		Cross			
			F	W	Sp	Su	listed
GEOG 560	GIScience I: Introduction to GIS	4	F	W*			
GEOG 561	GIScience II: Analysis and Applications	4		W			
GEOG 565	Spatio-temporal Variation in Ecology and Earth Science	4	F				
GEOG 580	Remote Sensing I: Principles and Applications	4	F	W*			
GEOG 595	Field Geography of Oregon **	3	F				
GEOG 596	Field Research in Geomorphology and Landscape Ecology**	3	F				
GRAD 514	Introduction to Graduate Writing	3				Su*	
GRAD 515	Creating Happiness Pers. And Prof. Apps. of Well Being	1		W*	Sp		
MB 513	Microbial Systems	3	F				
ME 552	Measurement in Fluid Mechanics and Heat Transfer	4		W			
ME 560	Advanced Fluid Flow	4	F				
ME 567	Engineering Applications of Computational Fluid Dynamics	4			Sp		
ME 568	Turbulent Flow Dynamics	4			Sp		
ME 667	Computational Fluid Dynamics	3		W			
MTH 524	Dynamical Systems Theory and Applications	3	F				
MTH 525	Dynamical Systems Theory and Applications	3		W			
OC 512	Basic Matlab for Environmental Science and Engineering	3	F				
OC 515	Oregon Coast Math Camp **	3	F				
OC 522	Ocean Biogeochemical Dynamics	4		W			
OC 646	Physical/Biological Interactions in the Upper Ocean	4			Sp		
OC 670	Fluid Dynamics	4	F				
OC 671	Geophysical Fluid Dynamics	4		W			
OC 675	Numerical Modeling in Ocean Circulation	4			Sp		
OEAS 500	Cascadia Field Trip **	3	F				
OEAS 530	The Fluid Earth	4	F				
PPOL 511	Public Organizations and Leadership	4	F			Su*	
PPOL 512*	Public Policy Theory	4		W*			
PPOL 522	Quantitative Methods for Policy Analysis	4			Sp		
PPOL 523	Qualitative Research Methods	4	F	W*	Sp	Su*	
PPOL 524	Applied Research Methods	4			Sp		
PPOL 541*	Energy, Climate and Society	4		W*			SOC 582
PPOL 547*	Integrated Policy: Food, Energy, Water, Climate	4				Su*	

Course	Course	Number of			Cross		
Number	Name	Credits	F	W	Sp	Su	listed
RNG 555	Rangeland Ecohydrology and Management	3		W	Sp		
SOC 580	Environmental Sociology	4	F	W*			
SOC 581*	Society and Natural Resources	4				Su*	
SOIL 525	Mineral-Organic Matter interactions	3		W			
SOIL 545	Environmental Soil Chemistry	3		W	Sp		
SOIL 555	Biology of Soil Ecosystems	4	F*	W			
ST 511	Methods of Data Analysis I	4	F	W		Su	
ST 512	Methods of Data Analysis II	4		W	Sp		
ST 513	Methods of Data Analysis III	4			Sp		
ST 531	Sampling Methods	3	F				
TOX 555	Ecotoxicology Aquatic Systems	3		W			
WRE 503	Thesis	1 to 16	F	W	Sp	Su	
WRE 505	Reading and Conference: Journal Club	1		W			
WRE 507	Seminar	1		W			
WRP 503	Thesis	1 to 16	F	W	Sp	Su	
WRP 505	Reading and Conference: Journal Club	1	F				
WRP 507	Seminar	1	F				
WRP 510	Internship	1 to 16	F	W	Sp	Su	
WRP 517	Writing in Water Resources	4				Su	
WRP 521	Water Conflict Management and Transformation	3	F*			Su	
WRP 523	Environmental Water Transactions	3		W*			
WRP 524	Sociotechnological Aspects of Water Resources	3	F				
WRP 544	Climate Resilient Natural Resource Management	3				Su	
WRP 548	Conducting Collaborative Research	3				Su	
WRP 558	The Business of Water	3			Sp		
WRS 503	Thesis	1 to 16	F	W	Sp	Su	
WRS 505	Reading and Conference: Journal Club	1			Sp		_
WRS 532	Applied Field Problems	3	_			Su	
WRS 536	Fundamentals of Hydrology	3				Su	

\*Only offered online this term

\*\* Has a Special Field Component