

Water Related Classes Offered at UNM – Spring 2012

This is a list of classes that we know about that may be of interest to students in the Water Resources Program and other programs who are studying topics related to the management, policy, science and engineering of water resources. Send additions or corrections to Annamarie Cordova (acordova@unm.edu) with a copy to Bruce Thomson (bthomson@unm.edu).

Course No.	Title	Description	Instructor	Time
Biology				
Biol 495	Limnology	Chemistry, physical and biological components of lakes and rivers	Dahm/Bixby	MWF 1100-1150 F 1400-1700
Biol 487L	Ichthyology		Turner	TBA
Chemistry				
Civil Engr.				
CE 335** (Counts as grad credit)	Intro. to Water & Wastewater Trt.	Basic design concepts of water & wastewater treatment. Flow rates, characterization of water, materials, balances, coagulation, flocculation, filtration, sedimentation, biological trt., & disinfection	Schuler	MWF 0900
CE 440/540	Des. of Hydr. Systems	Applications of the principles of fluid mechanics to the design & analysis of pipe systems. Topics include pipe network analysis, design & selection of hydraulic machinery and analysis of transient & compressible flow	Thomson	TR 1400-1515
CE 437/537	Envir. Chem. Analys.	Intro. to water chemistry and analytical methods used in lab & field research	Howe	TR 1600-1715
CE 547	GIS in Water Resources Engineering	Principles & operation of GIS using ArcGIS, work with surface & subsurface digital representation of the environment considering hydrologic & transport processes	Coonrod	MW 1000-1150
CE 598-003	River & Watershed Restor.	An introduction to the principles of watershed and stream restoration including physical	Stone	TR 1400-1515
CE 598-005	Aerosol Technology	Fundamental principles of aerosol behavior in fluids and their transport, deposition, measurement, and control	Dias da Cunha Thomson	MW 1600-1715
Community & Regional Planning				

CRP 527	Watershed Management Planning	Watershed conservation worldwide, with case studies from Latin America, Asia, North Africa, North America. Land use impacts on water quantity and quality. Each student chooses a watershed of their choice to write a watershed management plan and present it during the last week of classes.	Fleming	R 1400-1630
CRP 532	Foundations of Natural Resources Planning	Survey of methods and concepts of environmental planning, with an emphasis on hydrology and land use.	Fleming	W 1300-1530
Earth & Planetary Sci.				
EPS 433	Statistics & Data Analysis	Description: Selected mathematical methods of geological data analysis, including elementary statistics, matrix algebra, multivariate data analysis and Fourier analysis. 533 students will be required to complete homeworks and calculations using Matlab.	Gutzler	MWF 900-950
EPS 476-576 (AOA) WR 576	Physical Hydrology	Quantitative treatment of the hydrologic cycle - precipitation, evapotranspiration, infiltration, runoff and subsurface flow, global change and hydrology, catchment and hillslope hydrology, hydrologic system - ecosystem interactions, hydrology and water resources management. Prerequisites: Upper-division standing. Math 163L and Physics 160, or permission of instructor.	Weissmann	TR 1530-1645
Environmental Science				
ENVS 430/530	Adv. Env. Sci.	Application of basic science to the interdisciplinary study of environmental systems. Causes of and solutions to land, air, water and ecosystem degradation	Crossey	TR 1100-1215 W 1400-1650
ENVS 330	Environmental Systems		Weissmann	TR 930-1045
Economics				
Geography				
Geog 499-003	Energy, Environ. & Society	Provides a comprehensive and integrated approach to energy—its extraction, distribution, use, and impacts—will create the interdisciplinary knowledge base that is essential for making informed decisions about both our personal and societal patterns of energy consumption.	Hadjilambrinos	TR 930-1045
Geog 499-005	Governing the Global	This course offers a history and analysis of environme	Hadjilambrinos	F 1400-1630

	Environment	politics from the perspective of international relations exploring both global and regional environmental governance regimes.		
Geog 562	Water Resources Mgt		Matthews	TR 1230-1345
Geog 586L	Applications of GIS		Freundschuh	TR 830-945
Geog 588L	GIS Concepts & Techs.		Zandbergen	TR 1245-1400
Geog 514-011 aoa Law 593-016	Natl. Resources Mgt. Seminar	Discussion-based seminar exploring the interdisciplinary nature of contemporary natural resource challenges. Focus on resiliency & adaptive management	M. Benson	W 1730-2000
Law				
Law 593-045	Federal Law of Water Resources	The focus is on federal dimensions of water law, emphasizing federal water projects, interstate allocation, water rights for federal and tribal lands, and the interplay of traditional water laws and federal environmental law. Prereq: Law 547	R. Benson	TR 1300-1415
Law 593-016 aoa Geog 514-011	Natl. Resources Mgt. Seminar	Discussion-based seminar exploring the interdisciplinary nature of contemporary natural resource challenges. Focus on resiliency & adaptive management	M. Benson	W 1730-2000
Public Health				
PH 506	Environ. Occup. Health		Menache	W 1800-2030
Water Resources				
WR 572	Water Resources II- Models	Introduction to quantitative modeling & models used by water resource professionals; hydrological, economic, ecological, etc.	Thomson, Chermak, Tidwell	TR 1700-1845
WR 576 (AOA E&PS 576)	Physical Hydrology	Quantitative treatment of the hydrologic cycle - precipitation, evapotranspiration, infiltration, runoff and subsurface flow, global change and hydrology, catchment and hillslope hydrology, hydrologic system - ecosystem interactions, hydrology and water resources management. Prerequisites: Upper-division standing. Math 163L and Physics 160, or permission of instructor.	Weissmann	TR 1530-1645