

Water Related Classes Offered at UNM

Fall 2019

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Water Resources Program

Social Sciences-Economics Building, Room 1048

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UNIVERSITY OF NEW MEXICO
Water Resources Program

WATER RESOURCES CONTENT COURSES

FALL 2019

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Biology (BIO)

33928 Biol 502- 015 T: Ecology and Evol of Fishes TBA

Turner

Maximum of 4 hours credited towards the biology major. Restriction: permission of instructor.

60349 Biol 580L Global Change Biology MW 930-1045

Litvak

An advanced ecology course that gives students a broad overview of biological responses to global change at multiple levels of organization, and the scientific approaches used to study these responses. Prerequisite: 304 and 304L.

29800 Biol 508L Bosque Internship T 1600-1800

& Arranged

Eichhorst

Bosque Internship Students learn about and participate in monitoring the health of the bosque - groundwater depths, precipitation and leaf biomass. Also water chemistry, fuel load and surface-active arthropods. We talk quite a bit about water issues in Albuquerque and New Mexico in general

Civil Engineering (CE)

18105 CE 442 Hydraulic Engineering and Hydrology TR 1100-12:15

Gonzalez-Pinzon

Design of water distribution systems and open channels; selection of pumps and turbines; hydraulics of wells; basic engineering hydrology including precipitation, infiltration, runoff, flood routing, statistical measures and water resources planning. Prerequisite: 331 and MATH 1512. Restriction: admitted to School of Engineering.

51140 CE 534 Environmental Engineering Chemistry TR 1100 – 1215
Cerrato Corrales

A comprehensive survey including acid-base and precipitation equilibria, complexation of metals, transformation occurring in the environment adsorption, ion exchange. The approach will be quantitative and aimed at developing the student's ability to predict consequences of environmental manipulation, treatment processes and phenomena observed in the field. .

18135 CE 536 Physical-Chemical Water Treatment Processes TR 09:30 – 10:45

Schuler

Principles and design of wastewater treatment systems which are dependent on biological organisms. Processes covered include suspended culture and fixed culture systems, nutrient removal, hybrid systems, land application and on-site treatment systems. Emphasis will be placed on fundamental interaction between the organisms, wastes and receiving body of water.

66635 CE 541 Hydrogeology TR 03:30-04:45

Gonzalez-Pinzon

(Also offered as EPS 562/462) Hydrologic and geologic factors controlling groundwater flow, including flow to wells. The hydrologic cycle; interaction between surface and subsurface hydrologic systems; regional flow systems. Groundwater geochemistry and containment transport.

Community & Regional Planning (CRP)

44277 CRP 527 Watershed Management W 1200 – 1430

Tsinnajinnie

An introduction to the watershed as a rational planning unit, with case studies to illustrate principles of resource inventory, identification of land use problems and the formulation of plans for protection and rehabilitation.

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Geography (GEOG)

65601 GEOG 562 Water Governance TR 1100- 1215

Warner

An examination of the problems and trends in the use of water resources in the United States, with emphasis on the physical and social aspects related to its management.

56579 GEOG 583L Remote Sensing Fundamentals TR 1100 – 1215

W 0900-1050

Lippitt

Techniques for extracting information from Earth observing sensor data. Instruction includes steps of image processing from rectification and enhancement of digital aerial and satellite data, classification strategies, and merging of data with other map products. Prerequisite: **381L or 581L.

56579 GEOG 587L Spatial Analysis and Modeling T 1600 – 1830

Lin

Spatial analysis and modeling techniques using Geographic Information Systems. Includes a lab component that covers the use of GIS and other software to carry out analysis projects. Fee required. Prerequisite: **381L or 581L

Law (LAW)

66900 Law 547 Water Law Arranged

Benson

Water law topics.

67256 Law 593-026 T: Indian Water Law Indian Water Law Arranged

Wolfley

Indian Water Law

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Public Admin. (PADM)

PADM 521 Institutional Development and Behavior *Various Sections

Survey of theories of public organization, principles for planning in the public sector, methods of developing organizations, implementing changes and adapting to operational demands. Major issues of human behavior related to ethics and productivity. Restriction: permission of academic advisor.

31676 PADM 544 Public Budgeting S 1200-1430

Leon-Moreta

Basic management of public funds, preparation and processing of budgets, revenue projection and expenditure controls. Issues of public policy and establishment of priorities through budgeting. Restriction: permission of academic advisor.

**Must also sign up for online segment online CRN 48052

Public Health (PH)

67199 PH 501 Determinants and Equity in Public Health T 15:30 - 17:40

R 15:30 - 16:40

TBA

Concepts of public health related to determinants of health; cultural, social and political concepts of disease; disease prevention; health promotion, including individual behavior change and community based intervention; health policy. Restriction: admitted to M.P.H. Public Health.

67200 PH 502 Epidemiology and Biostatistics I T 13:00 - 14:40

R 12:00 - 13:40

TBA

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Provides an overview of the methods of epidemiologic research. Designed to provide students with the capability of understanding epidemiologic measures of disease occurrence, interpreting the findings of epidemiologic studies and integrating the results of epidemiologic research into public health practice. Prerequisite: MATH 1350 with a grade of "B" or better.

Statistics (STAT)

59509 STAT 527 Advanced Data Analysis TR 1530-1645

Erhardt

Statistical tools for scientific research, including parametric and non-parametric methods for ANOVA and group comparisons, simple linear and multiple linear regression and basic ideas of experimental design and analysis. Emphasis placed on the use of statistical packages such as Minitab and SAS. Course cannot be counted in the hours needed for graduate degrees in Mathematics and Statistics. Prerequisite: MATH 1350.

Water Resources (WR)

57911 WR 571 Water Resources I: Contemporary Issues TR 1600-1845

Berrens

Students examine contemporary issues in water resource systems, including water quality; ecosystem health; stakeholder concerns; economics; and water supply, policy, management and allocation. Emphasis on teamwork, cooperation, and oral, written and graphic communication.

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