

Bachelor of Science  
**ENVIRONMENTAL SCIENCE**

**GENERAL EDUCATION REQUIREMENTS (62 crs)**

**COMPLETED**

**Planned Timeline  
(By Semester)**

**Area I: Communications (9 crs)**

**Required**

ENG 111 English Composition I (3)

Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation

ENG 116 Technical Writing (3)

SPCH 130 Public Speaking (3)

Pre-requisite: ENG 109

**Area II: Mathematics (10 crs)**

MATH 145 Introduction to Probability & Statistics (3)

Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation

MATH 150 College Algebra (3)

MATH 162 Calculus I (4)

**Area III: Laboratory Sciences (24)**

BIOL 202/L Principles of Genetics with lab (4)

BIOL 203/L Ecology and Evolution with lab (4)

BIOL 210/L Microbiology with lab (4)

CHEM 121/L General Chemistry I with lab (4)

CHEM 210/L Integrated Organic & Biochemistry with lab (4)

**Choose one of the following:**

ES 201L Environmental Physical and Chemical Processes with lab (4)

CHEM 122/L General Chemistry II with lab (4)

**Area IV: Social and Behavioral Sciences (6 – 9)\***

ANTH 101/L Physical Anthropology with Lab

ANTH 102 Intro to Social/Cultural Anthropology

ANTH 110 Indian Culture of the Southwest

ANTH 207 Cultures of New Mexico

ECON 200 Macroeconomics

ECON 201 Microeconomics

GEOG 111 World Geography

HSS/HUM311 Readings in the Social Sciences \*\*

HSS/HUM414 Humanity and Creativity \*\*

HSS/HUM421 History, Literature, Art & Philosophy \*\*

PSCI 110 The Political World

PSCI 120 Contemporary Political Issues

PSCI 200 American Politics

PSCI 210 State and Local Government

PSCI 212 The American Presidency

PSY 105 General Psychology

PSY 210 Theories of Personality

PSY 229 Adolescent Psychology

PSY 230 Psychology of Adjustment

PSY 232 Abnormal Behavior

PSY 270 Social Psychology

PSY 290 Developmental Psychology

SOC 101 Introduction to Sociology

SOC 213 Deviant Behavior

SOC 216	Ethnic and Intercultural Relations	_____	_____
SOC 220	Social Problems	_____	_____
SOC 225	Marriage and the Family	_____	_____

\*\* Students in associate degree programs are advised that upper-division courses used to satisfy any of these requirements are not covered under financial aid.

**Area V: Humanities and Fine Arts (6 – 9)\***

**Required**

PHIL 220	Ethics (3)	_____	_____
HUM 100	FYE: History and Culture of Northern New Mexico (3)	_____	_____

**Elective (3)** You must select courses from **one other discipline area** from Area V courses.

ART 105	Introduction to Art (3)	_____	_____
ART 107	History of Art I (3)	_____	_____
ART 208	History of NM Art & Arch. I (3)	_____	_____
ART 211	History of Art II (3)	_____	_____
DANC 240	Dance Appreciation (3)	_____	_____
DANC 245	Dance History	_____	_____
ENG 270	Children’s Literature (3)	_____	_____
ENG 262	Literature of the Southwest (3)	_____	_____
ENG/PIS 265	Native American Literature I(3)	_____	_____
ENG/PIS 266	Native American Literature II(3)	_____	_____
ENG 280	Readings in Literature(3)	_____	_____
ENG 290	Study of Literature (3)	_____	_____
ENG 294	Mythology (3)	_____	_____
FDMA 280	History of Cinema (3)	_____	_____
HIST 101	Western Civilization I (3)	_____	_____
HIST 102	Western Civilization II (3)	_____	_____
HIST 161	History of U.S. to 1877 (3)	_____	_____
HIST 162	History of U.S. from 1877 (3)	_____	_____
HIST 220	Southwestern Women’s History (3)	_____	_____
HIST 230	Chicano Experience in the U.S. (3)	_____	_____
HIST 250	American Indian History (3)	_____	_____
HIST 260	History of New Mexico (3)	_____	_____
HUM 101	Humanities I (3)	_____	_____
HUM 102	Humanities II (3)	_____	_____
HUM 105	Humanities and the Southwest (3)	_____	_____
HUM 200	Comparative Religion (3)	_____	_____
HUM/HSS311	Readings in the Social Sciences ** (3)	_____	_____
HUM/HSS414	Humanity and Creativity ** (3)	_____	_____
HSS/HUM421	History, Literature, Art & Philosophy ** (3)	_____	_____
MUS 103	Music Hist & Lit I (3)	_____	_____
MUS 105	Music Appreciation (3)	_____	_____
MUS 218	Music Hist & Lit II (3)	_____	_____
PHIL 110	Intro to Philosophical Problems (3)	_____	_____
PHIL 111	History of Philosophy (3)	_____	_____
PHIL 250	Critical Thinking (3)	_____	_____
PIS 200	Introduction to Pueblo Indian Studies (3)	_____	_____
THE 120	Introduction to Theatre I (3)	_____	_____
THE 130	History of Theater (3)	_____	_____

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**Area VI Library Technology (1)**

LT 101	Library Research Skills (1)	_____	_____
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**Area VII Foreign Language**

**3 credits**

**PROGRAM REQUIREMENTS (34 crs)**

ES	112/L	Introduction to Environmental Sciences I with lab (4)	_____	_____
ES	325	Principles of Physical Hydrology (3)	_____	_____
ES	203	Introduction to GIS/GPS and Cartography (2)	_____	_____
ES	307	Atmospheric Science (3)	_____	_____
ES	320	Environmental Ethics (3)	_____	_____
ES	338	Environmental Law and Regulations (3)	_____	_____
ES	250	Watershed Hydrology and Management (3)	_____	_____
ES	401	Community Participation in Environmental Planning (3)	_____	_____
ES	412	Environmental Health and Toxicology (3)	_____	_____
ES	415	Energy and Resource Development (3)	_____	_____
ES	480	Senior Capstone – Field Experience (3)	_____	_____

You must choose **one** of the following concentrations (35 – 37 crs):

**Agriculture (35)**

BIOL	360/L	Botany with lab (4)	_____	_____
ES	225	Principles of Agricultural Ecology (3)	_____	_____
ES	308	Invasive Species (3)	_____	_____
ES	311	Plant Pathology (3)	_____	_____
ES	340	Principles in Crop Production (3)	_____	_____
ES	365	Principles of Sustainable Agriculture (3)	_____	_____
ES	410	Soil Testing and Interpretation (3)	_____	_____
ES	410/L	Soil Testing and Interpretation Lab (1)	_____	_____
ES	411	Soil Management and Fertility (3)	_____	_____
ES	416	Irrigation and Drainage (3)	_____	_____
ES	457	Economics, Food, and Agriculture in Industrial Development (3)	_____	_____
Electives (3 hrs)		Upper-division courses (as approved by department advisor)	_____	_____

**Environmental Science and Monitoring (35)**

ES	121	Environmental Air Monitoring (3)	_____	_____
ES	330	Principles of Environmental and Occupational Health (3)	_____	_____
RAD	234	Introduction to Radiation Science and Technology (4)	_____	_____
ES	333	Radiation Biology (3)	_____	_____
ES	336	Environmental Sampling and Instrumentation (3)	_____	_____
ES	336L	Environmental Sampling and Instrumentation Lab (3)	_____	_____
ES	400	Environmental Management (3)	_____	_____
ES	402	Environment, Economics, and Sustainability (3)	_____	_____
ES	410	Soil Testing and Interpretation (3)	_____	_____
ES	410L	Soil Testing and Interpretation Lab (1)	_____	_____
Electives (6 crs)		Upper-division courses (as approved by department advisor)	_____	_____

**Concentration Area: Natural Resources Science and Management (37 crs)**

ES	103	Introduction to Natural Resource Mgmt & Science (3)	_____	_____
FOR	113	Dendrology (3)	_____	_____
ES	120	Forest and Range Ecology (3)	_____	_____
ES	308	Invasive Species (3)	_____	_____
ES	310	Mensuration and Biometrics (3)	_____	_____
ES	317	Rangeland Management (3)	_____	_____
ES	318	Silviculture (3)	_____	_____
ES	404	Forest Health, Restoration, and Management (3)	_____	_____
ES	410	Soil Testing and Interpretation (3)	_____	_____

ES	410L	Soil Testing and Interpretation Lab (1)	_____	_____
ES	411	Soil Management and Fertility (3)	_____	_____
ES	414	Wildland Fire Management (3)	_____	_____
ES	319	Principles of Wildlife Science & Mgmt (3)	_____	_____

**TOTAL CREDIT HOURS 131-133**