



**Associate of Applied Science  
NATURAL RESOURCES - RANGE  
ECOLOGY MANAGEMENT**

This program is designed to provide entry-level skills for employment with the national park service or with other state and federal natural resource agencies. In addition, when you complete this program, you will have obtained the necessary courses to transfer to a four-year college or university to further pursue a degree in the field of range ecology.

**GENERAL EDUCATION (47 crs)**

	<b>Completed</b>	<b>Planned Timeline (by Semester)</b>
<b>Communications (9 crs)</b>		
ENG 111 English Composition I (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
ENG 116 Technical Writing (3) <i>Pre-requisite: ENG 111</i>	_____	_____
SPCH 130 Public Speaking I (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b>Math/Computers/Lab Sciences (29 crs)</b>		
BIOL 201 Principles of Molecular and Cell Biology (3) (Fall) <i>Pre-requisite: CHEM 121/L; Co-requisite: BIOL 201L</i>	_____	_____
BIOL 201L Molecular and Cell Biology Lab (1) (Fall) <i>Co-requisite: BIOL 201</i>	_____	_____
BIOL 202 Principles of Genetics (3) (Spring) <i>Pre-requisite: BIOL 201 and 201L</i>	_____	_____
BIOL 202L Genetics Lab (1) (Spring) <i>Co-requisite: BIOL 202</i>	_____	_____
CHEM 121 General Chemistry I (3) <i>Pre-requisite: MATH 130; high school chemistry within the past two years, or ACT score of 19 or higher in Natural Science</i> <i>Co-requisite: CHEM 121L</i>	_____	_____
CHEM 121L General Chemistry I Lab (1) <i>Co-requisite: CHEM 121</i>	_____	_____
ES 112 Introduction to Environmental Science I (3) (Fall) <i>Co-requisite: ES 112L</i>	_____	_____
ES 112L Introduction to Environmental Science I Lab (1) (Fall) <i>Co-requisite: ES 112</i>	_____	_____
GEOL 101 Physical Geology (3) <i>Co-requisite: GEOL 101L</i>	_____	_____
GEOL 101L Physical Geology Lab (1) <i>Co-requisite: GEOL 101</i>	_____	_____
CS 102 Computer Literacy (3)	_____	_____
MATH 145 Introduction to Probability and Statistics (3) <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i>	_____	_____
MATH 150 College Algebra (3) <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b>Social /Behavioral Sciences (6 crs)</b>		
<i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i> Electives (6) _____	_____	_____
<b>Humanities and Fine Arts (3 crs)</b>		
PHIL 220 Ethics (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b>Health, Physical Education &amp; Recreation (1 cr)</b>		
Elective _____(1)	_____	_____

**PROGRAM REQUIREMENTS (20 crs)**

ES 134	OSHA Health and Safety (3)	_____	_____
ES 120	Forest and Range Ecology (3)	_____	_____
ES 203	Introduction to GIS/GPS and Cartography (3)	_____	_____
<i>Pre-requisite: CS 102, or permission of instructor</i>			
ES 210	Soil Management and Fertility (3)	_____	_____
<i>Pre-requisite: ES 112/L, ES 201/L, and BIOL 203/L</i>			
ES 210L	Soil Management and Fertility Lab (1)	_____	_____
ES 217	Rangeland Management (3)	_____	_____
<i>Pre-requisite: ES 112/L and BIOL 203</i>			
ES 250	Watershed and Hydrology Management (3)	_____	_____
<i>Pre-requisite: ES 112/L, BIOL 203/L, and CHEM 121/L</i>			
ES 299	Practicum in Environmental Science (1)	_____	_____

**TOTAL CREDIT HOURS 68**

# Educational Planning Form (Semester)

Name \_\_\_\_\_ Date \_\_\_\_\_  
Major \_\_\_\_\_ Student ID \_\_\_\_\_

<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>

**Advisor's Signature** \_\_\_\_\_

**Student Signature** \_\_\_\_\_