

## ENVIRONMENTAL SCIENCE

### Department of Earth and Atmospheric Sciences

The environmental science major is an extended major (no minor required) designed as an entry-level major for MSCD students as well as for students transferring as juniors from the community colleges. In addition, students may choose from five options (concentrations) depending on their areas of interest. The multidisciplinary concentration provides students with a broad-based environmental science background, whereas the concentrations in water quality, environmental chemistry, and ecological restoration are more specialized. The environmental science option for secondary science teacher licensure is the remaining concentration available to students. All concentrations, except for environmental science for teacher licensure, require a unified core. Interested students should go to the Department of Earth and Atmospheric Sciences (Science Building, Room 231) to be assigned an advisor. Students interested in teacher licensure in secondary science should consult an advisor in environmental science and teacher education.

### Environmental Science Major for Bachelor of Science Ecological Restoration Concentration

Required General Studies Courses		Semester Hours
___	General Studies – Level I Mathematics: MTH 1110 College Algebra ( <i>required</i> ) .....	4
___	General Studies – Level II Natural Science: CHE 1800 General Chemistry I ( <i>required</i> ) .....	4
___	General Studies – Level II Natural Science: GEL 1010 General Geology ( <i>required</i> ) .....	4
___	Level I Composition .....	6
___	Level I Communications .....	3
___	Level II Historical .....	3
___	Level II Arts & Letters .....	6
___	Level II Social Sciences .....	6
<i>Total General Studies courses (see General Requirements Brochure) .....</i>		<i>33</i>
<i>Total Multicultural requirement .....</i>		<i>3</i>
<i>(Students who have not had a computer course will be required to take CSS 1010/CMS 1010.)</i>		

Required Core		Semester Hours
___	BIO 1080 General Introduction to Biology .....	3
___	BIO 1090 General Introduction to Biology Laboratory .....	1
___	CET 3320 Environmental Impact Statements .....	3
___	COM 3670 Writing for the Environmental Industry (Prerequisite: COM 2610 or permission of instructor) .....	3
___	ENV 1200 Introduction to Environmental Science .....	3
___	ENV 4200 Environmental Policy and Planning .....	3
___	GEG 1220 Map Use .....	2
___	MTH 1210 Introduction to Statistics .....	4
___	MTH 3240 Environmental Statistics .....	4
<i>Subtotal .....</i>		<i>26</i>

Students must select one of the following Senior Experience courses:

___	BIO 4510 Microbial Ecology .....	4
___	BIO 4540 Plant Ecology .....	4
___	CHE 4950 Senior Experience in Chemistry .....	3
___	ENV 4960 Global Environmental Challenges .....	3
___	ENV 4970 Environmental Field Studies .....	3
<i>Subtotal .....</i>		<i>3</i>

Students must select one of the following Internships (minimum 3 credit hours):

___	BIO 4990 Internship in Biology .....	3
___	CHE 4650 Chemistry Work Experience/Cooperative Education .....	4
___	GEG 4950 Internship in Land Use .....	3
___	GEL 4950 Internship in Geology .....	3
<i>Subtotal .....</i>		<i>3</i>
<i>Total Core Requirements .....</i>		<i>32</i>

## Ecological Restoration Concentration

### Additional Required Courses:

___	CHE 1810	General Chemistry II .....	4
___	CHE 1850	General Chemistry Laboratory .....	2
___	ECO 3450	Environmental Economics .....	3
___	ENV 3540	Advanced Geologic and Environmental Hazards – Denver and Vicinity .....	2
___	ENV 4000	Environmental Geology .....	3
___	ENV 4010	Environmental Hazards and Planning .....	3
___	ENV 49XX	Environmental Seminar (advisor approved) .....	3
___	GEL 3420	Soil Resources .....	4
___	PSC 3230	Environmental Politics .....	3
<i>Subtotal</i> .....			27

Electives (select at least 25 hours from the following list):

___	BIO 1180	General Organismic Biology .....	4
___	BIO 2100	General Botany .....	5
___	BIO 2200	General Zoology .....	5
___	BIO 2400	General Microbiology .....	5
___	BIO 3140	Plant Physiology .....	5
___	BIO 3180	Vascular Plant Taxonomy .....	4
___	BIO 3360	Animal Physiology .....	4
___	BIO 3550	Urban Ecology .....	4
___	BIO 4510	Microbial Ecology .....	4
___	BIO 4540	Plant Ecology .....	4
___	GEG/GEL	Topics courses (advisor approved) .....	2 – 3
<i>Subtotal</i> .....			25

<i>Total Ecological Restoration Courses</i> .....			52
General Studies and Multicultural Requirement .....			33
Multicultural Requirement .....			3
Total of Core Courses .....			32
<i>Total for Ecological Restoration Concentration</i> .....			120