

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 with backgrounds in water quality. 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 231) to be assigned an advisor and to pick up advising and career option sheets. Students interested in teacher licensure in secondary science should consult an advisor in environmental science and see the teacher education portion of the *MSCD Catalog*.

Environmental Science Major for Bachelor of Science Science Major for Secondary Science Teacher Licensure

Required Core		Semester Hours
___	BIO 1080 General Introduction to Biology	3
___	BIO 1090 General Introduction to Biology Laboratory	1
___	ENV 1200 Introduction to Environmental Science	3
___	GEG 1220 Map Use	2
___	MTH 1210 Introduction to Statistics	4
<i>Subtotal</i>		13
Senior Experience		
___	ENV 4960 Global Environmental Challenges	3
Internship		
___	EDS 4290 Student Teaching and Seminar: Secondary 7 – 12	12
<i>Total Core Requirements</i>		28
Additional Science Requirements		
___	BIO 1081 General Biology II.....	3
___	BIO 1091 General Biology Laboratory II.....	1
___	CHE 1100 Principles of Chemistry	4
___	CHE 1150 Principles of Chemistry Laboratory	1
___	CHE 2100 Introduction to Organic and Biological Chemistry	5
___	ENV 3400 Water Resources	3
___	ENV 3540 Advanced Geologic and Environmental Hazards – Denver and Vicinity	2
___	ENV 4000 Environmental Geology	3
___	GEL 1010 General Geology	4
___	GEL 1030 Historical Geology	4
___	GEL 3150 Hydrogeology	3
___	GIS 2250 Introduction to Geographic Information Systems	3
___	MTR 2400 Introduction to Atmospheric Science	4
___	PHY 2010 College Physics I	4
___	PHY 2020 College Physics II	4
___	PHY 2030 College Physics I Laboratory	1
___	PHY 2040 College Physics II Laboratory	1
<i>Total Additional Science Requirements</i>		50

General Studies

___	ENG 1010	Freshman Composition: The Essay	3
___	ENG 1020	Freshmen Composition: Analysis, Research, and Documentation	3
___	MTH 1400	Precalculus Mathematics	4
___	SPE 1010	Public Speaking	3
History – General Studies (elective courses)			3
Arts and Letters – General Studies (elective courses)			6
Natural Science – General Studies requirement satisfied under Additional Science Requirements			
Social Science – General Studies requirement satisfied under Secondary Education Requirements			
Multicultural – Requirement satisfied under Secondary Education requirements			
<i>Total General Studies</i>			22

Secondary Education Requirements

___	EDS 3110	Processes of Education in Multicultural Urban Secondary Schools	3
___	EDS 3120	Field Experiences in Multicultural Urban Secondary Schools	2
___	EDS 3200	Educational Psychology Applied to Teaching	3
___	EDS 3210	Standards-Based Curriculum, Assessment, and Classroom Management in the Secondary School	3
___	EDS 3220	Field Experience in Standards-Based Teaching, Assessment, and Management in the Secondary School	2
___	EDT 3610	Applications of Educational Technology	2
___	RDG 3280	Teaching Literacy Skill Development in the Content Areas	4
___	SCI 3950	Teaching Science in Middle and Secondary Schools	3
___	SED 3600	The Exceptional Learner in the Classroom	3
<i>Total Secondary Education Requirements</i>			25

Total Core Requirements 28

Total Additional Science Requirements 51

Total General Studies 22

Total for Secondary Science Teacher Licensure Concentration in Environmental Science125