

ENVIRONMENTAL SCIENCE MAJOR

Associate Professor: D. Schmidt

Contact: Dr. David Schmidt Phone: (573) 592-6124

Email: David.Schmidt@westminster-mo.edu

The majors in Environmental Science and the Environmental Studies provide students with (a) an understanding of relationships between and within the natural world and constructed environments; (b) the ability to analyze and integrate knowledge from a wide range of disciplines; (c) the ability to communicate across disciplines and collaborate with colleagues to solve problems and address real-world issues; and (d) the basis for careers in environmental fields as well as graduate studies.

The two majors have similar degree requirements but with different emphases. Common to both majors are the internship and the capstone course requirements. Internships, which may be completed on or off campus, allow students to work alongside resource professionals in fields related to the student's career interest. Environmental Assessment (ENV 405) satisfies the capstone requirement. In this class, each student researches, evaluates and presents an environmental issue of his or her choice. This facilitates the integration of knowledge gained in the classroom and during the internship and helps students develop important skills in critical thinking and communication that are essential in environmental careers.

The **Environmental Science** major serves students who are interested in working in the environmental field as a researcher or practitioner, helping to conserve, protect and manage natural resources. Those earning an environmental science degree often work outdoors but may also work in analytical laboratories; they may seek employment as soil scientists, ecologists, wildlife biologists, hydrologists or geologists.

NOTE: Since the Environmental Science program is viewed as a broad curriculum, it is strongly suggested that students take a Minor in a related field, such as Biology, Chemistry, Economics, or Political Science. Students cannot major (or minor) in both Environmental Science and Environmental Studies. **Students should pay particular attention to course prerequisites and to required course sequences.** Other courses may be substituted for degree requirements with approval of Environmental Science Faculty. **Students must have a 2.00 grade point average in all courses used to satisfy the major requirements. No more than two (2) grades of D/D+ can be counted towards satisfying the major.** At least 33% of all hours used to satisfy the major (20-22) must be Westminster courses.

If any substitutions of waivers of requirements are allowed, please list below and initial.

Course #	Title of Course	Hours Completed	Semester Completed	Grade

Date Major Declared

4

4

4

3

3

3 5

60-66 hrs.

Total Hours for Major

Environmental

Advisor

MAJOR: Science

BIO 124/125

CHM 114/115

CHM 124/125

MAT 114

MAT 121

<u>or</u>MAT 122

<u>or</u> MAT 124

Biodiversity

Statistics

Calculus I

Pre-Calculus I

Business Calculus

General Chemistry I

General Chemistry II

Student's Last Name First Name Middle Initial

Course #	Title of Course	Hours Required	Semester Completed	Grade		
Required Courses (9 hrs):					
ENV 105	Intro. to Environmental Science	3				
ENV 399	Internship	3				
ENV 405	Environmental Assessment	3				
	Social Sciences/Humanities (9 hrs.): Choose three of the following:					
ENV/ENC 377	Environmental & Resource Economics	3				
ENV 300/ENG 315	Environmental Literature	3				
PHL 246	Environmental Ethics	3				
POL 326	Environmental Politics & Policy	3				
REL 324	Religion & the Environment 3	3				
	Physical Science/Geology (10-12 hrs.)					
	Complete three courses from this list; at least 2 courses must be 300-level:					
GEO 108	Intro to Physical Geology	4				
GEO 116	Environmental Geology	4				
GEO 300	Surficial Geology	4				
GEO 305	Hydrogeology	3				
GEO 327	Weather and Climate	3				
GEO 330	Applications of Geographic Info. Sys.	4				
	Ecology & Resource Management (10-12 hrs.)					
	Complete three courses from this list; One course must be BIO 205*					
*BIO 205	Ecology and Field Biology (*Required)	4				
BIO/ENV 210	Biogeography	3				
BIO 300	Ecotoxicology & Lab	4				
BIO/ENV 340	Wetlands	3				
BIO/ENV 345	Forest Resources & Management	4				
BIO/ENV 350	Conservation Biology	3				
GEO 300	Earth Materials	3				
BIO/GEO/ENV 320/321	Travel Course	4				
	Other Required Courses (22-24 hrs.)					
BIO 114/115	Biological Processes	4				