

# ENVIRONMENTAL SCIENCES MINOR

## For Bachelor of Arts and Bachelor of Science

The Environmental Sciences Minor is an interdisciplinary minor that integrates the subjects of Biological Sciences, Chemistry, and Earth and Planetary Sciences. The minor requires courses in the foundations of environmental sciences, the principles of ecology, and geographic information systems (GIS). Students also choose from a selection of courses that cover topics in environmental science like aquatic ecosystems, ecology, environmental chemistry, and geosciences.

The Environmental Sciences Minor requires 18 credits (six courses) with a minimum of six credits (two courses) at the 300- or 400-level. Students are limited to a maximum of three courses from within one discipline to fulfill minor requirements. The requirement to take courses from different disciplines helps ensure the program's interdisciplinary nature.

Code	Title	Credits
BIOL 208	Principles of Ecology	3
EASC 221	Introduction to Geographic Information Systems	3
ENVS 300	Principles of Environmental Science	3
Choose 9 credits (3 courses) from the following with no more than 6 credits (2 courses) in any one discipline (BIOL, CHEM, EASC, or ENVS)		9
BIOL 310	Freshwater Ecology	
BIOL 312	Terrestrial Ecology	
BIOL 314	Population Ecology	
BIOL 316	Community Ecology	
BIOL 361	Marine Biology	
BIOL 365	Tropical Rainforest Ecology	
BIOL 367	Conservation Biology	
BIOL 410	Techniques in Field Ecology	
BIOL 414	Invasion Ecology and Management	
BIOL 422	Methods in Experimental Ecology	
BIOL 467	Advanced Conservation Biology	
BIOL 477	Contemporary Issues in Freshwater Ecology	
CHEM 320	Introduction to Geochemistry <sup>1</sup>	
CHEM 322	Introduction to Biogeochemistry <sup>2</sup>	
CHEM 372	Environmental Chemistry	
CHEM 472	Advanced Environmental Chemistry	
CHEM 474	Environmental Analytical Chemistry	
CHEM 484	Sustainable and Green Chemistry	
EASC 225	Introduction to Geomorphology	
EASC 226	Introduction to Soil Science	
EASC 238	Geology of Natural Resources	
EASC 271	The Oceans	
EASC 320	Introduction to Geochemistry <sup>1</sup>	
EASC 322	Introduction to Biogeochemistry <sup>2</sup>	
EASC 334	Remote Sensing	
EASC 373	Anthropogenic Climate Change	
EASC 375	Paleoclimatology	
ENVS 398	Independent Study	

ENVS 492	Environmental Sciences Work Integrated Learning
ENVS 495	Special Topics in Environmental Sciences
ENVS 498	Advanced Independent Study

**Total Credits** **18**

1

Credit can only be obtained in one of CHEM 320 (<https://calendar.macewan.ca/search/?P=CHEM%20320>) or EASC 320 (<https://calendar.macewan.ca/search/?P=EASC%20320>)

2

Credit can only be obtained in one of CHEM 322 (<https://calendar.macewan.ca/search/?P=CHEM%20322>) or EASC 322 (<https://calendar.macewan.ca/search/?P=EASC%20322>).