

Associate of Science Degree (ASCES) Environmental Science

Program Outline

PROGRAM IMPLEMENTATION DATE: OUTLINE EFFECTIVE DATE: PROGRAM OUTLINE REVIEW DATE: pre-2010 September 2022 April 2027

GENERAL PROGRAM DESCRIPTION:

An Associate of Science (ASc) Degree provides students with the first two years of study towards a Bachelor of Science degree. The ASc in Environmental Science offers students cross-disciplinary studies that relate to local and global environmental issues.

Using an interdisciplinary approach to build a strong foundation in science, the ASc in Environmental Science will provide students with an understanding of the Earth's natural systems and how human interactions impact those systems. A combination of learning modes and learning environments including lectures, labs, tutorials, field trips and guest lectures will give students the opportunity to integrate and apply their knowledge of biological, physical, Earth and environmental sciences to examine current environmental issues and explore solutions to some of the most important problems facing humanity today.

Credential Granted

Students who complete all requirements with a minimum C average will be granted an Associate of Science degree in Environmental Science.

The Associate Degree guarantees 60 transfer credits to BC's research universities, even if all the courses taken towards the ASc in Environmental Science degree do not transfer individually to an institution. Students are still responsible for completing all degree requirements of the receiving institution, which may entail completing more than 60 additional credits.

Program Information

Courses in the ASc in Environmental Science program have been selected for transfer to degree programs at other institutions, including the Environmental Science BSc programs at University of Lethbridge, Simon Fraser University (Applied Biology or Environmental Earth Systems concentration), and University of Northern BC. Many courses can also be applied towards professional designations:

- Professional Geoscientist (P.Geo) with the Engineers and Geoscientists BC or Association of Professional Engineers and Geoscientists of Alberta
- Registered Professional Biologist (R.P.Bio) with the College of Applied Biology or Alberta Society Professional Biologists or

Registered Agrologist (P.Ag) with the BC institute of Agrologists or Alberta Institute of Agrologists.

Bachelor degree programs generally accept students by competitive admission; the ASc degree in Environmental Science does not guarantee admission to a degree program. Students who transfer into a degree program are responsible for meeting all entrance requirements and degree completion requirements, and in some cases these requirements entail additional coursework to complete the 120 credits generally required of a Bachelor of Science degree. For a list of transfer policies at each institution, please see https://www.bctransferguide.ca/associate/transfer.

Delivery: This program is delivered face-to-face and online

COTR Credits: 60

Hours for this program: 1440 to 1530 hours

Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	900
Seminars / Tutorials	
Laboratory / Studio Hours	540-630
Practicum / Field Experience Hours	
Other Contact Hours	
Total	1440-
	1530

Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-job Experience	
Formal Work Experience	
Other	
Total	

Program Outline Author or Contact:

Katie Burles, Math and Science Program Coordinator

APPROVAL SIGNATURES:

Department Head Erin Aasland Hall E-mail: <u>aaslandhall@cotr.bc.ca</u>

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Dean of Business and University Studies

Department Head Signature

EDCO

Valid from: September 2022 - April 2027

Education Council Approval Date

Signature

Dean Signature

PROGRAM PREREQUISITES AND TRANSFER CREDIT:

Admission Requirements:

- Secondary school graduation or equivalent.
- Minimum 65% in either English First Peoples 12, ENGL 090, or equivalent (refer to Course Equivalency information on the College Website).
- Either a minimum of 65% in MATH 090, MATH 100 or Principles 12; or Pre-Calculus 11 AND Pre-Calculus 12 with a minimum of 65%; or Pre-Calculus 12 and a minimum of 75% in Calculus 12.

Recommended

Basic computer skills Biology 11 or Life Sciences 11

Flexible Assessment (FA):

Credit can be awarded for one or more courses in this program through FA 🛛 🗹 Yes 🗖 No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit:For transfer information within British Columbia, Alberta and other institutions,
please visit http://www.cotr.bc.ca/Transfer

Students should also contact an academic advisor at the institution where they want transfer credit.

Specific Requirements and Sample Courses for University of Lethbridge transfer:

6 Credits in First Year English

Required:	One of:
ENGL 100	ENGL 101, ENGL 102

6 Credits in Mathematics

Required:	One of:
MATH 103	MATH 101, MATH 102, MATH 104, STAT 106

36 Credits in Science

At least 3 credits in a laboratory science	<i>Up to 15 credits in other science courses</i>	At least 18 credits in second year science in two or more subject areas
ENSC 101	BIOL 101, BIOL 102, CHEM 101, CHEM 102, GEOG 101	BIOL 203, BIOL 204, CHEM 215*, GEOG 211, GEOG 230, GEOG 251

*UofL and UNBC accept CHEM 201 in place of CHEM 215

6 Credits in Arts other than English

Humanities other than English	Social Sciences	Fine Arts
FNST 101, HIST 201, HIST 202,	ECON 101, ECON 102, ECON	FA 101, FA 105
PHIL 102	250, ENST 200, POLI 100	

6 Credits in Arts, Science or other areas

Arts	Science	other
ANTH 101	BIOL 200, BIOL 208, GEOL 105	

Specific Requirements and Sample Courses for University of Northern BC transfer:

6 Credits in First Year English

Required:	One of:
ENGL 100	ENGL 101, ENGL 102

6 Credits in Mathematics

Required:	
MATH 103, MATH 104	

36 Credits in Science

At least 3 credits in a laboratory science	<i>Up to 15 credits in other science courses</i>	At least 18 credits in second year science in two or more subject areas
ENSC 101	BIOL 101, BIOL 102, CHEM 101, CHEM 102, GEOG 101	BIOL 200, BIOL 204, CHEM 215*, GEOG 211, GEOG 230, GEOG 251

*UofL and UNBC accept CHEM 201 in place of CHEM 215

6 Credits in Arts other than English

Humanities other than English	Social Sciences	Fine Arts
ANTH 101, FNST 101, HIST 201,	ECON 101, ECON 102, ECON	FA 101, FA 105
HIST 202, PHIL 102	250, ENST 200, GEOG 210, POLI	
	100, PSYC 101, PSYC 102,	

6 Credits in Arts, Science or other areas

Arts	Science	other
	PHYS 103, PHYS 104, BIOL 208,	
	GEOL 105, STAT 106	

Specific Requirements and Sample Courses for Simon Fraser University transfer:

6 Credits in First Year English

Required:	One of:
ENGL 100	ENGL 101, ENGL 102

6 Credits in Mathematics

Required:	
MATH 103, MATH 104	

36 Credits in Science

At least 3 credits in a laboratory	Up to 15 credits in other science	At least 18 credits in second		
science	courses	year science in two or more		
		subject areas		
ENSC 101	BIOL 101, BIOL 102, CHEM 101,	BIOL 203, BIOL 204, BIOL 208,		
	CHEM 102, GEOG 101	CHEM 215, GEOG 211, GEOG		
		230, GEOG 251		

Note: Only required for Applied Biology concentration.

6 Credits in Arts other than English

Humanities other than English	Social Sciences	Fine Arts						
ANTH 101, FNST 101, HIST 201,	ECON 101, ECON 102, ECON	FA 101, FA 105						
HIST 202, PHIL 102	250, ENST 200, GEOG 210, POLI							
	100, PSYC 101, PSYC 102							

6 Credits in Arts, Science or other areas

Arts	Science	other
ENST 200	PHYS 103, PHYS 104, GEOL 105,	
	STAT 106	

COURSE GRADE

Course grades are assigned as follows:

		A+	А	A-	B+	В	B-	C+	С	C-	D	F
ſ	Mark	≥ 90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	< 50
((Percent)											

A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

COURSE DESCRIPTIONS can be found on the COTR SharePoint site: <u>http://www.cotr.bc.ca/CourseOutlines/</u>

Co-operative Education Option:

Students enrolled in this program may be eligible to choose Co-op as an option. The Co-op option involves alternating full-time academic and work terms. For more information, contact C-op and Employment Services.