Clayton H. Riddell Faculty of Environment, Earth, and Resources



Direct Entry

Have you defined your future as one dedicated to addressing environmental issues, resource development, or human-environment relations?

Degree Programs and High School Prerequisites for University Level Courses

Applicants for Direct Entry to the Clayton H. Riddell Faculty are admitted directly into their degree program of choice.

Bachelor of Environmental Studies (Major)

A minimum average of 70% over the following, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses*

Bachelor of Environmental Science (Major)

A minimum average of 70% over the following, with no less than 60% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Physics 40S
- One of Biology, Chemistry, or Computer Science 40S

Both the Bachelor of Environmental Studies and Bachelor of Environmental Science degree programs offer a General and Honours degree..

Both the Bachelor of Environmental Studies (Major & Honours) and Bachelor of Environmental Science (Major & Honours) degree programs offer the Co-operative Option.

Bachelor of Arts in Geography (General) - Geography

A minimum average of 70% over the following, with no less than 60% in each course:

- English 40S
- Mathematics 40S
- Two academic 40S courses*

The Bachelor of Arts in Geography also offers an Advanced and Honours degree.

Bachelor of Science in Physical Geography (Major)

A minimum average of 70% over the following, with no less than 60% in each course:

- Enalish 40S
- Pre-Calculus Mathematics 40S
- Physics 40S
- One of Biology, Chemistry, or Computer Science 40S

The Bachelor of Science in Physical Geography degree also offers an Honours option. Both degree programs offer the Co-operative Option.

Bachelor of Science in Geological Sciences - Geology, Geophysics

Geology:

A minimum average of 70% over the following, with no less than 60% in each course:

- English 40S
- Pre-Calculus Mathematics 40S
- Chemistry 40S
- Physics 40S

Geophysics:

A minimum average of 70% over the following, with no less than 60% in each course:

- English 40S
- Pre-Calculus Mathematics 40S 3. Chemistry 40S
- Physics 40S

The Bachelor of Science in Geological Sciences also offers a General degree in Geological Sciences.

*The list of Academic 40 S courses can be found in the **Direct Entry Programs Applicant Information Bulletin 2021** – **2022**

Environmental Science & Environmental Studies

The Earth's environment influences everything we do, and increasingly we can also see how we can impact the environment itself. Humans have always affected their environments, but it is only recently that we have become aware of our influence and of environmental damage.

Today, more than ever, the environment has become a major concern for not only scientists and scholars but also government, industry, agriculture, mining, and the public in general.

Studying the environment involves not only looking at environmental problems but also at solutions, and this requires practical skills, a diverse academic training, and flexibility to balance human needs with environmental sustainability.

Environmental scientists look at many aspects of our world and seek to understand how it works and our influence upon it. They collect information about the nature of the air, water, soil, and biological systems and determine the quality of those systems, how they change, and the implications for humanity and the future.

Environmental studies graduates look at our world from a number of perspectives and seek to understand the complex and diverse relationships between humans and the environment. They examine the implications of resource needs and environmental degradation and identify sustainable philosophies and practices.

Courses to consider for 1st year:

ENVR 1000 Environmental Science 1: Concepts
ENVR 2000 Environmental Science 2: Issues

Geography

Geography is a broad synthesizing discipline that studies humans and the Earth by focusing on the themes of place and space. Geography is therefore not an encyclopedic listing of capital cities, mountains, and rivers, but rather an understanding of the causes, effects, implications, and importance of these and other features. As Geography is so broad, it is often studied as a number of separate but closely related sub-disciplines, notably physical geography and human geography, and also regional geography, topical geography and geographic techniques.

Physical geographers look at the world around them and can identify and explain the phenomena and processes they see. They use scientific methods to collect information about the Earth and its many features, and use it to describe how it works.

Courses to consider for 1st year:

GEOG 1290 Introduction to Physical Geography

Human geographers look at the world and its people and can evaluate the complex challenges they face, their distinct societal, cultural, and individual qualities, and the space and places they occupy. They may use scientific and qualitative methods to collect information about people, communities, and societies, and identify potential problems and solutions.

Courses to consider for 1st year:

GEOG 1280 Introduction to Human Geography
GEOG 1290 Introduction to Physical Geography
GEOG 1700 Social Justice in the 21st Century: Global Political Economy and Environmental Change

Geological Sciences

The Geological Sciences apply principles from many different fields to deal with all aspects of the solid Earth and its interactions with the hydrosphere, atmosphere, biosphere, and Solar System. They can help tackle resource extraction, mineral processing, and environmental problems, and predict future changes to the Earth.

Geoscientists explore mountain ranges to investigate how the Earth's tectonic plates have collided and study fossils to decipher the evolution of life. They measure the violent shaking generated by earthquakes to understand the layered structure of the Earth's interior and explore for mineral and petroleum resources.

Geologists

Geologists study the composition, structure, processes, and history of the Earth, as well as the distribution of mineral and energy resources.

Geophysicists

Geophysicists use the principles of physics and mathematics to study the Earth's surface, internal structure and composition, atmosphere, and magnetosphere.

Courses to consider for 1st year:

GEOL 1340 The Dynamic Earth

GEOL 1400 Time-Trekker's Travelog: Our Evolving Earth