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



RECOMMENDED INTRODUCTORY COURSES
CLAYTON H. RIDDELL FACULTY OF ENVIORNMENT, EARTH, AND RESOURCES

# **ENVIRONMENT, EARTH, AND RESOURCES**

# **EER 1000 Earth: A User's Guide – Interdisciplinary**

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

- Take this course if you want an introduction to how we use the Earth and its resources and what you need to know to do so wisely.
- Topics may include Earth's resources (including minerals, water and biodiversity), human interactions with the environment and resources, and current topics of interest.

#### **GEOGRAPHY**

#### **GEOG 1280** Introduction to Human Geography – Social Sciences

This course studies aspects of the human world: population, settlement and resources.

- Take this course if you want an introduction to how human activities, issues and problems shape and are shaped by the everyday world and everyday environments.
- Topics may include population, settlement and growth;, agriculture, industry and extractive economies; culture, societies and social movements; inequality, economics and globalization.
- Special note: Two of GEOG 1280, GEOG 1290 or GEOG 1700(GPE 1700) required for Geography BA. Required for Environmental Studies programs.

## **GEOG 1290** Introduction to Physical Geography – Sciences

This course studies aspects of our physical environment: climate, landforms, soils and vegetation.

- Take this course if you want to understand how the Earth and its atmosphere, hydrology, land surface and biosphere work together as a system.
- Topics may include weather and climate, hydrology, land surface processes (such as rivers, glaciers, deserts and coastlines) and solid Earth processes (such as volcanoes and earthquakes).
- Special note: Two of GEOG 1290, GEOG 1280 or GEOG 1700 (GPE 1700) required for Geography BA. Required for Geography BSc (Physical Geography) and Environmental Studies. Can be used a substitution course for Environmental Science.

# GEOG 1700 Social Justice in the 21st Century:

# Global Political Economy and Environmental Change – Interdisciplinary

Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, evironmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics.

- Take this course if you want to learn about how human societies interact with natural systems (and vice versa) and how these interactions influence local cultures and global economies.
- Topics may include globalization, political economy, environmental and social justice, inequality, urban change, climate change, political engagement, and 21st century global citizenship.
- Special note: Two of GEOG 1700 (GPE 1700), GEOG 1280 or GEOG 1290 required for Geography BA.

#### **ENVIRONMENT**

#### **ENVR 1000 Environmental Science 1, Concepts – Interdisciplinary/Sciences**

This course will introduce students to the conceptual framework of the environment by examining its physical, biological, and social components. General topics to be considered will include ecological principles and the responses of natural and managed systems to disturbance; population growth; biodiversity and conservation; and environmental sustainability.

- Take this course if you want an introduction to issues and problems associated with environmental change.
- Topics may include sustainability, ecosystems, environmental toxins, water resources, atmospheric and climate change, and energy resources (such as fossil fuels and alternative energy).
- Special note: Required for Environmental Science and Environmental Studies.

## **GEOLOGICAL SCIENCES**

#### **GEOL 1340 The Dynamic Earth – Sciences**

An introduction to dynamics of the Earth's interior and surface that created the environment in which life evolved and that continue to change the world in which people now live. This section must be taken with a laboratory/tutorial.

- Take this course if you want to understand the geologic foundations of how the Earth's interior and surface processes shape the environment we live in and how it continues to evolve.
- Topics may include rocks and minerals, rivers, coastlines, glaciers, surface erosion and slope processes, plate tectonics, earthquakes, land and mountain formation.
- Special note: Required for admission to any Geological Sciences program. Required for Environmental Sciences program (unless substituted with GEOG 1290 see above).

#### **GEOL 1400** Time-Trekker's Travelog: Our Evolving Earth – Sciences

Take a trip across billions of years, as we explore awesome times in the evolution of our planet and its life – from dust to us!

- Take this course if you want to understand how life on Earth evolved and how it shaped and was shaped by the Earth's
- Topics may include geologic time, fossils, evolution, climate and environmental change and geologic change.
- Special note: GEOL 1400 is required for the Geology program; one of 1400, 1410 or 1420 is required for Geological Sciences (General) BSc and Geophysics BSc.

#### **GEOL 1410 Natural Disasters and Global Change – Sciences**

Discover how and when natural disasters occur, and how to identify and recognize them. Explore the Earth processes that lead to natural disasters and global change.

- Take this course if you want to understand how and when natural disasters occur and the processes that cause them.
- Topics may include earthquakes, volcanoes, flooding, landslides, sinkholes, fires and meteorite impacts.
- Special note: One of GEOL 1400, 1410 and 1420 is required for Geological Sciences (General) BSc and Geophysics BSc.

#### **GEOL 1420 Exploring the Planets – Sciences**

Discover the Solar System as we explore ancient ideas and modern concepts. Emphasis will be on recent space exploration and a comparison of the Earth and its neighbours.

- Take this course if you want to understand the environments of stars, planets, moons, meteorites and other celestial bodies.
- Topics may include the Sun, Earth, planets and moons of the Solar System, meteorites, comets and celestial bodies beyond the Solar System.
- Special note: One of GEOL 1400, 1410 and 1420 is required for Geological Sciences (General) BSc and Geophysics BSc.

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