



# World Geography 3202

## Physical Geography Unit 1: Land and Water Forms

Introduces students to the first of three components that make up the physical earth – land and water forms, climate, and ecosystems. The unit will help students to examine the constituent parts of the physical environment, forces that created them, patterns in their distribution, and how they influence, and are influenced by, selected human activities.

### Suggested Teaching and Learning Strategies

Generally this unit can pertain to the Oceanography section of the Oceanography and Planktology Presentation Resource

Ocean currents activity

Thermohaline activity

## Physical Geography Unit 2: World Climate patterns

Provides an opportunity for students to examine some of the basic forces that produce our weather and climate, how they produce climate patterns on the earth's surface, and relate to human activity. These patterns are strongly affected by the distribution of landforms and water forms.

### Specific Curriculum Outcomes

2.3 The student will be expected to demonstrate an understanding of the cause of winds and how winds affect climate

2.4 The student will be expected to demonstrate an understanding of how ocean currents affect climate

## Suggested Teaching and Learning Strategies:

The Oceanography section of the Oceanography and Planktology Presentation Resource especially the currents and El Nino/El Nina sections

Ocean Currents Activity

Thermohaline Activity

### *Physical Geography Unit 3: Ecosystems*

Focuses on the interrelationships between landforms and water forms on the one hand and climate on the other, and how these interrelationships make up the earth's ecosystems. Soils, which result from a complex interaction among climate, land, flora and fauna, form a vital resource that humans use to satisfy needs and wants. Students will understand that humans must exercise wise stewardship in order to conserve resources.

## Specific Curriculum Outcomes

3.1 The student will be expected to demonstrate an understanding that an ecosystem consists of a complex network of organisms

3.1.3 Outline the energy flow through and ecosystem

## Suggested Teaching and Learning Strategies:

Using the General Aquaculture Presentation Resource concentrating on the mussel life cycle section as well as the planktology section of the Oceanography and Planktology Presentation Resource

Energy Flow of a Mussel Farm Activity

## ***Economic Geography Unit 4: Primary Resource Activities***

Shifts the focus from physical geography to economic geography; more specifically to a study of how humans interact with land resources (i.e., farming and forestry) and ocean resources (i.e., oil recovery and fishing) to satisfy needs and wants. Students will also understand that culture and technology shape what is deemed to be a resource and that the use of resources varies from place to place but still reflects spatial patterns.

### **Specific Curriculum Outcomes**

4.7 The student will be expected to explore issues related to the management of the fish resource

4.7.3 Develop an argument for the development of the aquacultural sector of the fishery

4.7.6 Develop strategies for a sustainable fishery

4.7.7 Predict possible effects of a declining fish resource on the livelihood of fishers

### **Suggested Teaching and Learning Strategies:**

To start a debate on aquaculture use the following resource documents for background information:

CAIA FAQ Resource

Did you know: Facts about salmon farming Resource

BC salmon growers association questions and answers about salmon farming Resource

Myths and Realities about salmon farming Resource

For 4.7.6 and 4.7.7 use the General Aquaculture Presentation Resource, the BC salmon growers association: sustainable aquaculture Resource and Canada's Sustainable Fish and Seafood Resource to discuss the industry and its sustainability for the Ocean Market Activity.