

Course Plan: SS12 Physical Geography

COURSE DESCRIPTION:

SS12 Physical Geography is designed to empower students by providing them with strong communication skills, an understanding and appreciation of language and literature, and the capacity to engage fully as literate and responsible citizens in a digital age. Students are guided in learning to think critically, creatively, and reflectively; to construct a sense of personal and cultural identity; and to be respectful of a range of perspectives and worldviews. For the complete Ministry curriculum document for **SS12 Physical Geography**, please go to: <u>https://curriculum.gov.bc.ca/curriculum/social-studies/12/physical-geography</u>

BIG IDEAS:

The Big Ideas consist of generalizations and principles and the key concepts important in an area of learning. They reflect the "Understand" component of the Know-Do-Understand model of learning. The big ideas represent what students will understand at the completion of the curriculum for their grade. They are intended to endure beyond a single grade and contribute to future understanding.

Incorporating data from a variety of sources allows us to better understand our globally connected world. Natural processes have an impact on the landscape and human settlement. Interactions between human activities and the atmosphere affect local and global weather and climate.

CORE COMPETENCIES:

A Core Competency is a skill that all learners need to have to be successful in all aspects of their life. There are 3 core competencies: Communication (Communicating & Collaborating), Thinking (Critical Thinking, Creative and Reflective Thinking), Personal (Personal Awareness and Responsibility, Social Awareness and Responsibility and Positive Personal and Cultural Identity).



COURSE EXPECTATIONS:

- The self-paced nature of this course requires that students manage their time effectively to complete the course by the deadline (typically a year from the date of registration). Successful students make a weekly schedule to plan out the completion of the course.
- Students must read all the information and attempt all activities in the course in order to be successful in the course.
- Students must take care that their communication with the teacher and with other students through email, Moodle message, or in person, is course related, clear and respectful.
- Students must take care that their work is their own and not plagiarized from any other source. This includes, previous work submitted for another course, other people's assignments, Web or other resources etc.

LEARNING STANDARDS: Curricular Competencies

- Use geographic inquiry processes and geographic literacy skills to ask questions; gather, interpret, and analyze data and ideas from a variety of sources and spatial/temporal scales; and communicate findings and decisions (evidence and interpretation)
- Assess the significance of places by identifying the physical and/or human features that characterize them (sense of place)
- Assess the interpretations of geographic evidence after investigating points of contention, reliability of sources, and adequacy of evidence (evidence and interpretation)
- Draw conclusions about the variation and distribution of geographic phenomena over time and space (patterns and trends)
- Evaluate how particular geographic actions or events affect human practices or outcomes (geographical value judgments)
- Evaluate features or aspects of geographic phenomena or locations to explain what makes them worthy of attention or recognition (geographical importance)
- Identify and assess how human and environmental factors and events influence each other (interactions and associations)

• Make reasoned ethical judgments about controversial actions in the past and/or present, and determine whether we have a responsibility to respond (geographical value judgments)

Unit 1 will cover the following Learning Outcomes (Curricular Competencies)

- Use geographic inquiry processes and geographic literacy skills to ask questions; gather, interpret, and analyze data and ideas from a variety of sources and spatial/temporal scales; and communicate findings
 - and decisions (evidence and interpretation)
- Assess the significance of places by identifying the physical and/or human features that characterize them (sense of place)

These are 2 of the 8 learning outcomes in the course curriculum, which comprises 25% of the course Learning Outcomes/Activities. (2/8= 25%)

LEARNING STANDARDS: Course Content

Students are expected to know the following:

- structure of, feedback within, and equilibrium of natural systems
- distinguishing features of the atmosphere, hydrosphere, cryosphere, lithosphere, biosphere, and anthroposphere
- connections and interactions between the spheres
- features and processes of plate tectonics and their effects on human and natural systems
- features and processes of gradation and their effects on human and natural systems
- natural disasters and their effects on human and natural systems
- features and processes of Sun–Earth interactions and resulting patterns of climate, landscapes, and ecosystems
- climate, weather, and interactions between humans and the atmosphere
- characteristics of global biomes, including climate, soil, and vegetation
- features and processes of the anthroposphere and their effects on natural systems.
- natural resources and sustainability

UNIT OVERVIEWS AND LEARNING ACTIVITIES:

Unit 1 - Earth Structure

Students will explore essential geographic themes and skills such as location and place and study the physical structure of the Earth. Students can expect to find out about layers of the Earth and about plate tectonics. Students will go on to learn about earthquakes and volcanoes then will wrap up the unit with a section on the main types of rocks.

Big Idea: Incorporating data from a variety of sources allows us to better understand our globally connected world.

Core Competency: Thinking

First Peoples Principle of Learning: *Learning involves recognizing the consequences of one's actions.* Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.

Unit 2 - Climate

Students in this unit, will be learning about climate and how it is expressed in various parts of the world based on the energy that we receive from the sun and how that energy interacts with Earth's atmosphere, land and oceans. They will learn that climate is measured over decades or centuries and that weather is measured in hours and days. They will come to understand what the atmosphere is composed of and how it is maintained by the biosphere, which is the part of the atmosphere inhabited by living things.

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Unit 3 – Our Dynamic Earth

Students will be studying natural processes and the impacts that they have on the landscape and human settlements. Students will look at how humans have altered our world, and will be asked to think about the upper limits to our control of resources on this planet. The big takeaway here is that the planet is constantly changing under the forces that push it skyward and others which wear it down.

Student will learn about natural disasters such as earthquakes and volcanic eruptions and will be asked to consider how these events are only disastrous from a human perspective.

Big Idea: Natural processes have an impact on the landscape and human settlements.

Core Competency: Thinking

First Peoples Principle of Learning: Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships and a sense of place.

Unit 4 - Biomes

Students will be studying Earth's biomes, including both the major terrestrial and aquatic biomes. How biomes form where they do as well as the climatic and geographical reasons for their formation and the present threats to Earth's biomes and what can be done to address these.

Big Idea Human activities and resource use affect the environment.

Core Competency: Thinking

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STUDENT LEARNING ACTIVITIES AND STRATEGIES:

- Course readings
- Quizzes
- Interactive activities
- Reflective writing
- Assignments may include:
 - Essay/multi-paragraph writing
 - Paragraph writing
 - Verbal speeches/marketing ideas
 - Projects using a variety of technology
 - Podcasts, digital recordings
 - Presentations using a variety of tools (PowerPoint, Prezi etc)

ASSESSMENT:

The course will include many formative assessment opportunities where students will receive teacher feedback and also have the opportunity to incorporate self-reflection and self-assessment tools. The formative tasks are designed to help students correct, hone and improve on their work before being assessed. After each full submission of work, the teacher will provide feedback based on criteria and performance standards that can then be incorporated into the final summative assignment. Summative assessment will take place after extensive formative assessment and be used on final performance tasks and tests throughout each unit. This course will be using specific rubrics for different tasks and students will have access to these rubrics before submission of the assignments. The North Vancouver Curriculum Hub Principles of Assessment - http://nvsd44curriculumhub.ca/assessment/

Formative:

- Teacher student conferences (online or in person) to discuss drafts and progress
- Online quizzes to check for completion and understanding of lessons.

Summative:

- Assignments and projects written feedback, rubric assessment and grade
- Final performance task written feedback, rubric assessment and grade
- Tests to check for comprehension, analysis, and synthesis of course learning

EVALUATION:

Based on performance standards and criteria as outlined in each assignment:

Evaluation	Percentage of Final Mark
Introductory Unit - Substantive Assignments	10
Assignments	30
Learning Guides	10
Quizzes	10
Unit Projects	20
Unit Tests	20
Course Total	100

RESOURCES:

There are some required texts for this course, which will be available either online or can be signed out from the teacher. Resources for readings and assignments are listed in the instructions of each lesson. These include websites maintained by government and non-profit organizations, as well as individuals. Students need access to a computer with Internet capabilities. Throughout the course, students will have the choice to engage with a variety of applications and online digital tools. The DL Centre is available for students who do not have computer access at home or who would like to meet with the teacher for academic and tech support.