

YEAR 11

GEOGRAPHY



SRI KDU
International
School
SUBANG JAYA

PROGRAMME OF STUDY - TERM 1

CHANGING ECOSYSTEMS

- Characteristics of the Antarctic ecosystem
 - The location of the Antarctic ecosystem.
 - The characteristics of the Antarctic climate: high pressure, the influence of latitude, angle of the sun, temperature, precipitation.
 - The features of the Antarctic ecosystem.
 - The interrelationships between abiotic and biotic factors in the Antarctic ecosystem and how flora and fauna adapt to survive.
- Threats to the Antarctic ecosystem and how they can be managed
 - The threats posed to Antarctica, for example, resource exploitation, climate change, fishing, tourism.
 - The impacts of the destruction of the Antarctic ecosystem.
 - An evaluation of the strategies and techniques used to manage the Antarctic ecosystem; including sustainable
- Characteristics of the tropical rainforest ecosystem
 - The global distribution of tropical rainforests.
 - The characteristics of the equatorial climate: overhead sun, low pressure, convectional rainfall, temperature, latitude.
 - The characteristics and structure of the tropical rainforest ecosystem.
 - The interrelationships between abiotic and biotic factors in the tropical rainforest ecosystem and how flora and fauna adapt to survive.
- Threats to tropical rainforest ecosystems and how they can be managed
 - The threats to tropical rainforest ecosystems, for example, deforestation, resource exploitation, logging, road and railway building, cattle ranching, hydroelectric power, farming, settlements.
 - The impacts of the destruction and deforestation of tropical rainforest ecosystems.
 - An evaluation of the strategies and techniques used to manage the tropical rainforest ecosystem; including sustainable.
 - One detailed specific example of a named country or tropical rainforest area to include:
 - threats to the tropical rainforest ecosystem
 - impacts of the destruction and deforestation of the tropical rainforest ecosystem
 - the strategies and techniques used to manage the tropical rainforest ecosystem; including sustainable.

TECTONIC HAZARDS

- The structure of the Earth and distribution of earthquakes and volcanoes
 - The characteristics of the layers of the Earth: inner core, outer core, mantle, crust, lithosphere.
 - The names and location of the main tectonic plates and how tectonic plates move.
 - Types of plate boundary: divergent/constructive, convergent/destructive, convergent/collision, conservative/transform and the location of earthquakes and volcanoes
- The processes and features associated with earthquakes and volcanoes
 - The processes experienced at each type of plate boundary which cause earthquakes and volcanic eruptions.
 - The main characteristics of earthquakes: focus, epicentre, seismic waves.
 - Types of volcano: strato-volcano (composite cone), shield, cinder cone.
 - The classification of volcanoes as active, dormant, or extinct.
 - The main features of volcanoes: crater, vent, magma, magma chamber, secondary cone.
 - Volcanic hazards: lava flows, ash falls, lahars, pyroclastic flows, tephra, volcanic rocks, toxic gases; the significance of speed, size, frequency, and spread.
- The impacts of tectonic hazards
 - Reasons why people live in areas at risk from earthquakes and volcanic eruptions.
 - The impacts of earthquakes.
 - The impacts of volcanic eruptions.
 - How the magnitude of a tectonic event is measured: moment magnitude scale, Richter scale, Mercalli scale, the volcanic explosivity index (VEI).
- Managing the impacts of tectonic hazards
 - Primary and secondary responses.
 - An evaluation of the strategies and techniques used to manage the impacts of earthquakes and volcanic eruptions: monitoring, prediction, protection, planning and technology.
 - One detailed specific example to include:
 - the causes and impacts of an earthquake on a named country/area
 - the responses to the earthquake
 - the strategies and techniques used to manage the impacts of earthquakes.
 - One detailed specific example to include:
 - the causes and impacts of an eruption of a named volcano
 - the responses to the volcanic eruption
 - the strategies and techniques used to manage the impacts of volcanic eruptions

CLIMATE CHANGE

- The natural and human causes of climate change
 - Evidence of climate change: global temperature data, ice cores, sea ice positions, historic writing and paintings.
 - Factors influencing natural climate change: orbital changes (Milankovitch cycles), sunspots, volcanic activity.
 - The human influence on the atmosphere causing the enhanced greenhouse effect. For example, the use of fossil fuels, deforestation, agriculture.
- The impacts of climate change at a range of geographic scales
 - The present day and predicted future impacts of climate change. For example, rising sea levels, and changes to global temperature, weather patterns, and food production.
- Responses to climate change
 - The strategies (including national and international agreements) and techniques used to manage the impacts of climate change.
 - An evaluation of mitigation (including international agreements) and adaptation strategies and techniques used to manage the impacts of climate change.
 - One detailed specific example of a named country or region to include:
 - the impacts of climate change
 - the responses to climate change
 - the strategies and techniques being used to manage climate change; including sustainable.