

St. Francis Xavier's College
Scheme of working for F.3 Geography (2023-2024)

List of Textbooks:

- (1) Junior Secondary Exploring Geography Book 11 (Elective) – Changing Climate, changing environments (Third Edition) – Oxford
- (2) Junior Secondary Exploring Geography Book 10 (Elective) – Taming the sand (Third Edition) – Oxford

Term 1

Time allocation (Cycle & periods required)	Topic	Teaching Objectives	National Security Education (NSE)	Assignment
Cycle 1-2 (3 periods)	<p>1.1) What is happening to global climate?</p> <p>1.2) What is the climatic pattern of the world?</p> <p>1.3) What is the climate of South China?</p> <p>1.4) Is the global climate changing?</p>	<ul style="list-style-type: none"> - Introduction of Form 3 Geography - Definitions of weather and climate - General climatic pattern of the world - A brief introduction of climate of South China - Map interpretation: Isotherm map, annual precipitation pattern, temperature differences in different periods and changes in annual precipitation - Graph reading : climatic graph, scatter diagram and line graph <p><u>Geographical terms / concepts:</u> Climate/ precipitation/ low-latitude region/ high-latitude region/ weather/ relative humidity/ air pressure/ isotherm/ tropical region/ temperate region/ polar region/ subtropical region/ monsoon climate/ mid-latitude/ rainstorm</p>	/	<p><u>Pre-lesson task</u> Worksheet 1: 2-day weather forecast for Hong Kong (HKO) & weather instruments <i>Video Link:</i> https://www.youtube.com/watch?v=ySSyT44nma4</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 1</p>

<p>Cycle 3-4 (5 periods)</p>	<p>2.1) What is causing our climate to change? 2.2) What is the greenhouse effect? 2.3) What has led to the increase in the amount of greenhouse gases?</p>	<ul style="list-style-type: none"> - Greenhouse and the mechanism of greenhouse Effect - Major types of greenhouse gases - Human factors (e.g. burning fossil fuels, deforestation, farming activities, waste treatment, emission of chlorofluorocarbons from industrial activities) in leading to global warming <p><u>Geographical terms / concepts:</u> Greenhouse effect/ atmosphere/ water vapour/ carbon dioxide/ methane/ greenhouse gas (GHG)/ global warming/ radiation/ chlorofluorocarbon/ nitrous oxide/ fossil fuel/ deforestation/ incinerator/ landfill</p>	<ul style="list-style-type: none"> - Understand how human activities affect and threaten Ecological Security and New Domain Security (Polar Security) <p>This fits the learning elements of:</p> <ul style="list-style-type: none"> - Understanding national security’s definition and its 13 domains (such as Ecological Security, as well as Polar Security of the New Domain Security)’ under Strand 1 of NSE - Understanding the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security and New Domain Security’ under Strand 7 of NSE 	<p><u>Pre-lesson task</u> Worksheet 2: What is the greenhouse effect? <i>Video Link:</i> https://www.youtube.com/watch?v=SN5-DnOHQmE</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 2</p>
<p>Cycle 5-7 (6 periods)</p>	<p>3.1) What are the effects of climate change? 3.2) What are the possible benefits of climate change? 3.3) How does climate change affect China?</p>	<ul style="list-style-type: none"> - Possible benefits and harmful effects of climate change - Case study: Tuvalu - Effects of climate change in China - How climate change affects blizzards in China <p><u>Geographical terms / concepts:</u> Glacier/ ice sheet/ meltwater/ iceberg/ meteorological hazard/ typhoon/ blizzard/ condensation/ evaporation/ storm surge/ desertification/ heat wave/ wildfire/ pest/ habitat/ ecological balance/ coral bleaching/ biodiversity</p>	<ul style="list-style-type: none"> - Understanding the impacts of climate change on polar ice and the ecology with reference to photos/videos/satellite images, so as to understand how climate change threatens Ecological Security and New Domain Security (Polar Security) <p>This fits the learning elements of:</p> <ul style="list-style-type: none"> - Understanding national security’s definition and its 13 domains (such as Ecological Security, as well as Polar Security of the New Domain Security)’ under Strand 1 of NSE 	<p><u>Pre-lesson task</u> Worksheet 3: What are the impacts brought by global warming? <i>Video Link:</i> https://www.youtube.com/watch?v=N9Aod-pmBNc&ab_channel=AlluringPlanet</p>

			- Studying the topics related to Ecological Security and New Domain Security (Polar Security), so as to understand the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security and New Domain Security' under Strand 7 of NSE	<u>Post-lesson task</u> Revision Worksheets Unit 3
Cycle 8-9 (4 periods)	<p>4.1) What is happening in Hong Kong?</p> <p>4.2) What are the causes of the changing climate in Hong Kong?</p> <p>4.3) What are the possible effects of climate change in Hong Kong?</p>	<ul style="list-style-type: none"> - Evidence showing our climate is changing at local scale (Hong Kong) - Natural and human causes of the changing climate in Hong Kong - Consequences of climate change in Hong Kong <p><u>Geographical terms / concepts:</u> Thunderstorm/ heat island/ transpiration</p>	<ul style="list-style-type: none"> - Understanding the impacts of climate change on China (including Hong Kong) <p>This fits the learning elements of:</p> <ul style="list-style-type: none"> - Understanding national security's definition and its 13 domains (such as Ecological Security)' under Strand 1 of NSE - Studying the topics related to Ecological Security, so as to understand the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security' under Strand 7 of NSE 	<p><u>Pre-lesson task</u> Worksheet 4: Climate change, none of our Hong Kong's business?</p> <p><i>Video Link:</i> https://www.youtube.com/watch?v=lAssZ39_00U</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 4</p>
Exam Period + Discussion of Paper				

Term 2

<p>Cycle 11-12 (4 periods)</p>	<p>5.1) What can we do about it?</p> <p>5.2) Why is international cooperation in combating climate change difficult?</p> <p>5.3) What should we do as individuals to combat climate change?</p>	<ul style="list-style-type: none"> - Mitigation and adaptation measures taken by different countries to combat climate change - A brief review of the difficulties in international cooperation in combating climate change - Mitigation and adaptation measures taken by individuals to combat climate change <p><u>Geographical terms / concepts:</u> Carbon neutrality/ energy efficiency/ renewable energy resource/ solar power/ wind power/ recycling/ carbon sink/ more developed country (MDC)/ less developed country</p>	<ul style="list-style-type: none"> - From discussing the solutions to climate change, students can understand the ways to achieve Ecological Security and New Domain Security (Polar Security) and their importance <p>These fit the learning elements of:</p> <ul style="list-style-type: none"> - Understanding national security’s definition and its 13 domains (such as Ecological Security)’ under Strand 1 of NSE - Studying the topics related to Ecological Security, so as to understand the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security’ under Strand 7 of NSE 	<p><u>Pre-lesson task</u> Worksheet 5: Trend of waste sorting in China</p> <p><i>Video Link:</i> https://www.youtube.com/watch?v=uddjg4CM_pE</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 5</p>
<p>Cycle 13-15 (4 periods)</p>	<p>1.1) What are deserts?</p> <p>1.2) Where are deserts?</p> <p>1.3) What are the characteristics of desert?</p>	<ul style="list-style-type: none"> - Global distribution of tropical and temperate deserts - Major deserts in the world - Characteristics of deserts <p><u>Geographical terms / concepts:</u> Desert/ atmosphere/ annual precipitation/ Tropic of Cancer/ Tropic of Capricorn/ latitudes/ tropical desert/ temperate desert/ moisture/ daily range of temperature/ scarce/ evaporation rate/ sand dune/ groundwater/ oasis</p>	<p style="text-align: center;">/</p>	<p><u>Pre-lesson task</u> Worksheet 6: Causes of desertification</p> <p><i>Video Link:</i> https://www.youtube.com/watch?v=ygeg_IsqH9U</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 6</p>

<p>Cycle 15-17 (4 periods)</p>	<p>2.1) What is desertification?</p> <p>2.2) Where are the major desertified areas in the world?</p> <p>2.3) Which region in China is facing a risk of desertification?</p> <p>2.4) What are the physical and human causes of desertification in northern China?</p>	<ul style="list-style-type: none"> - Definition of desertification - Major desertified areas in the world - Distribution pattern of desertification-prone areas in China - Causes of desertification in northern China - Impacts of desertification on people and natural environment in northern China <p><u>Geographical terms / concepts:</u> Desertification/ dryland/ savanna/ productivity/ land degradation/ soil erosion/ soil fertility/ sparse vegetation/ overgrazing/ carrying capacity/ over-cultivation/ deforestation/ relative humidity/ drought/ evapotranspiration/ sandstorm/ dust storm</p>	<ul style="list-style-type: none"> - Learning how human activities lead to desertification, which destroy the land resources and ecology of our country, and therefore threatens the Resource Security (e.g. land resources) and Ecological Security <p>These fit the learning elements of:</p> <ul style="list-style-type: none"> - Understanding national security's definition and its 13 domains (such as Resource Security and Ecological Security)' under Strand 1 of NSE - Studying the topics related to Ecological Security, so as to understand the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security' under Strand 7 of NSE 	<p><u>Pre-lesson task</u> Worksheet 7: Discover more about deserts</p> <p><i>Video Link:</i> https://www.youtube.com/watch?v=dEILbbptwfo</p> <p><u>Post-lesson task</u> Revision Worksheets Unit 7</p>
<p>Cycle 18-20 (4 periods)</p>	<p>4.1) What has happened to the area of desertified in northern China in recent years</p> <p>4.2) What has been done to keep desertification in check?</p>	<ul style="list-style-type: none"> - Changes in desertified land in China in recent years - Mitigation and adaptation measures taken by the Central government to combat desertification <p><u>Geographical terms / concepts:</u> Windbreak/ shelter belt/ afforestation/ straw checkerboard/ rotational grazing/ biodiversity/ drip irrigation/ drought-resistant crop/ reforested area/ cash crop/ agribusiness/ ecotourism</p>	<ul style="list-style-type: none"> - From the measures for easing desertification and sandstorms adopted by our country, learn how we can achieve Resource Security and Ecological Security by protecting land resources and the ecological environment <p>These fit the learning elements of:</p>	<p><u>Pre-lesson task</u> Worksheet 8: China desertification control achievement</p> <p><i>Video Link:</i> https://www.youtube.com/watch?v=nUoqqvrPcH8</p>

			<ul style="list-style-type: none"> - Understanding national security's definition and its 13 domains (such as Resource Security and Ecological Security)' under Strand 1 of NSE - Studying the topics related to Ecological Security, so as to understand the effects of human activities on the ecology and natural environment, and the need of safeguarding Ecological Security' under Strand 7 of NSE 	<u>Post-lesson task</u> Revision Worksheets Unit 8
Exam Period + Discussion of Paper				

Assignments:

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| <ul style="list-style-type: none"> - Revision Worksheets will be marked after every Unit. - Additional MC questions, Data-Based questions will be used for training students before the examination. |
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Assessment Mode and Weighting:

Form 3	
1 st Term	☐ 10% Assignments + 10% Regular Test + 10% Classroom Performance + 70% Exam
2 nd Term	☐ 10% Assignments + 10% Regular Test + 10% Classroom Performance + 70% Exam