<table>
<thead>
<tr>
<th>EXAM 2023</th>
<th>Year 10</th>
<th>Year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term 1 (21/22)</strong></td>
<td><strong>Getting started in IGCSE Geography (0460)</strong>&lt;br&gt;- Share syllabus with students - brief discussion of the topics that will be taught throughout the course and how the IGCSE will be assessed.</td>
<td><strong>2.2 Rivers</strong>&lt;br&gt;• Changing channel characteristics&lt;br&gt;• Drainage basins&lt;br&gt;• River processes&lt;br&gt;• Landforms of erosion&lt;br&gt;• Landforms of deposition&lt;br&gt;• River hazards and opportunities&lt;br&gt;• Managing the impacts of floods&lt;br&gt;&lt;br&gt;<strong>Case Study required for 2.2</strong>&lt;br&gt;• The opportunities presented by a river or rivers, the associated hazards and their management</td>
</tr>
</tbody>
</table>
The impacts of differing population structures
The dependency ratio

Case Study required for 1.3
- A country with a high dependent population

1.4 Population density and distribution
- Population density - how it is measured
- How people are spread around the world

Case Studies required for 1.4
- A densely populated country or area (at any scale from local to regional)
- A sparsely populated country or area (at any scale from local to regional)

Skills

1.1 Population Dynamics
Candidates should be able to:
- Describe and give reasons for the rapid increase in the world's population
- Show an understanding of over-population and under-population
- Understand the main causes of a change in population size
- Give reasons for contrasting rates of natural population change

Further guidance:
- Causes and consequences of over-population and under-population
- How birth rate, death rate and migration contribute to the population of a country increasing or declining
- Impacts of social, economic and other factors (including government policies, HIV/AIDS) on birth and death rates.

1.3 Population Structure
Candidates should be able to:

2.2 Rivers
Candidates should be able to:
- Explain the main hydrological characteristics and processes which operate in rivers and drainage basins
- Demonstrate an understanding of the work of a river in eroding, transporting and depositing
- Describe and explain the formation of the landforms associated with these processes
- Demonstrate an understanding that rivers present hazards and offer opportunities for people
- Explain what can be done to manage the impacts of river flooding

Further guidance:
- Characteristics of rivers (including width, depth, speed of flow, discharge) and drainage basins (including watershed, tributary, confluence)
- Processes which operate in a drainage basin (including interception, infiltration, throughflow, groundwater flow, evaporation, overland flow)
- Forms of river valleys – long profile and shape in cross-section, waterfalls, potholes, meanders, oxbow
### Term 2

<table>
<thead>
<tr>
<th>Topic and Content</th>
<th>1.2 Migration</th>
<th>1.5 Settlements and Service Provision</th>
</tr>
</thead>
</table>
| **1.2 Migration** | ● The nature and reasons for population migration  
● The impacts of migrations | ● Rural Settlement  
● Pattern  
● Village form  
● Site and situation  
● Settlement Hierarchy  
● Factors affecting the size, growth and function of settlements |
| **Case Study required for 1.2** | ● An international migration | **Case Study required for 1.5**  
● Settlement and service provision in an area |
| **2.1 Earthquakes and Volcanoes** | ● Types and features of volcanoes and earthquakes  
● Distribution of earthquakes and volcanoes  
● Plate tectonics | |

### Methods of Assessment

- Description and analysis of graphs and data
- Drawing and analysing population pyramids
- Linking population structure to development
- Case studies
- Past paper questions

### Further guidance:

- Age/sex pyramids of countries at different levels of economic development

### 1.4 Population Distribution and Density

Candidates should be able to:
Describe the factors influencing the density and distribution of population

**Further guidance:**
● Physical, economic, social and political factors

### 3.4 Tourism

Candidates should be able to:
- Describe and explain the growth of tourism in relation to the main attractions of the physical and human landscape
- Evaluate the benefits and disadvantages of tourism to receiving areas
- Demonstrate an understanding that careful management of tourism is required in order for it to be sustainable

**Further guidance:**
- Causes of hazards (including flooding and river erosion)
- Opportunities of living on a flood plain or a delta or near a river
- Drawing and explaining geographical processes
- Fieldwork skills for Paper 4

### Lakes, deltas, levées and flood plains

- Causes of hazards (including flooding and river erosion)
- Opportunities of living on a flood plain or a delta or near a river
- Drawing and explaining geographical processes
- Fieldwork skills for Paper 4
<table>
<thead>
<tr>
<th>Case Studies required for 2.1</th>
<th>1.6 Urban Settlements</th>
</tr>
</thead>
<tbody>
<tr>
<td>An earthquake</td>
<td>Urban land use</td>
</tr>
<tr>
<td>A volcano</td>
<td>Landuse models (Burgess and Hoyt)</td>
</tr>
</tbody>
</table>

| 1.7 Urbanisation             | Internal structure of towns and cities |
|------------------------------| Problems associated with urban growth |

<table>
<thead>
<tr>
<th>Case Study required for 1.6</th>
<th>An urban area or urban areas</th>
</tr>
</thead>
</table>

| 1.7 Urbanisation             | Urbanisation                 |
|------------------------------| Urban problems in developing countries |
|                              | Solutions to urban problems  |
|                              | New cities                   |
|                              | Managing urban problems      |
|                              | Urbanisation and the environment |

<table>
<thead>
<tr>
<th>Case Study required for 1.7</th>
<th>A rapidly growing urban area in a developing country and migration to it</th>
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</table>

<table>
<thead>
<tr>
<th>Skills</th>
<th>1.2 Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates should be able to:</td>
<td>Explain and give reasons for population migration</td>
</tr>
<tr>
<td></td>
<td>Demonstrate an understanding of the impacts of migration</td>
</tr>
</tbody>
</table>

**Further guidance:**
- Internal movements such as rural-urban migration, as well as international migrations, both voluntary and involuntary
- Positive and negative impacts on the destination and origin of the migrants, and on the migrants themselves.

<table>
<thead>
<tr>
<th>2.1 Earthquakes and Volcanoes</th>
<th>1.5 Settlement</th>
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</thead>
<tbody>
<tr>
<td>Candidates should be able to:</td>
<td>Explain the patterns of settlement</td>
</tr>
<tr>
<td></td>
<td>Describe and explain the factors which may influence the sites, growth and functions of settlements</td>
</tr>
<tr>
<td></td>
<td>Give reasons for the hierarchy of settlements and services</td>
</tr>
</tbody>
</table>

**Further guidance**
- Dispersed, linear, and nucleated settlement patterns
- Influence of physical factors (including relief, soil, water supply) and other factors (including accessibility, resources)
- High-, middle- and low-order settlements and services.
<table>
<thead>
<tr>
<th>Earthquakes</th>
<th>Volcanoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe and explain the distribution of earthquakes and volcanoes.</td>
<td>Describe and explain the causes of earthquakes and volcanic eruptions and their effects on people and the environment.</td>
</tr>
<tr>
<td>Demonstrate an understanding that volcanoes present hazards and offer opportunities for people.</td>
<td>Explain what can be done to reduce the impacts of earthquakes and volcanoes.</td>
</tr>
</tbody>
</table>

**Further guidance**
- Types of volcanoes (including strato-volcanoes [composite cone] and shield volcano)
- Features of volcanoes (including crater, vent, magma chamber)
- Features of earthquakes (including epicentre, focus, magnitude)
- The global pattern of plates and their structure; an awareness of plate movements, subduction zones and their effects – constructive/divergent, destructive/convergent and conservative plate boundaries.
- Sphere of influence and threshold population.

1.6 Urban Settlements

**Candidates should be able to:**
- Describe and give reasons for the characteristics of, and changes in, land use in urban areas.
- Explain the problems of urban areas, their causes and possible solutions.

**Further guidance**
- Land use zones including the Central Business District (CBD), residential areas, industrial areas and the rural-urban fringe of urban areas in countries at different levels of economic development.
- The effect of change in land use and rapid urban growth in an urban area including the effects of urban sprawl.
- Different types of pollution (air, noise, water, visual), inequality, housing issues, traffic congestion and conflicts over land use change.

1.7 Urbanisation

**Candidates should be able to:**
- Identify and suggest reasons for rapid urban growth.
- Describe the impacts of urban growth on both rural and urban areas, along with possible solutions to reduce the negative impacts.

**Further guidance**
- Reference should be made to physical, economic and social factors which result in rural depopulation and the movement of people to major cities.
- The effects of urbanisation on the people and the natural environment.
- The characteristics of squatter settlements.
- Strategies to reduce the negative impacts of urbanisation.
## Methods of Assessment

- Annotation of diagrams and maps
- Drawing diagrams of processes
- Learning key term definitions
- Writing case studies - framework
- Description and analysis of graphs and data
- Case studies
- Past paper questions

## Term 3

### Topic and Content

#### 3.1 Development
- Indicators of development
- Explaining inequalities between countries
- Explaining inequalities within countries
- Classifying production into different economic sectors
- How employment structure varies
- The process of globalisation
- The impacts of globalisation: the global scale
- The impacts of globalisation: the national scale
- The impacts of globalisation: the local scale

**Case Study required for 3.1**
- A transnational corporation and its global links

#### 3.7 Environmental risks of economic development
- The threat of economic activities to the natural environment
- Enhanced global warming
- Soil erosion and desertification
- Examples of environments under threat
- The importance of resource conservation
- China's Pearl River Delta

**Case Study required for 3.7**
- An area where economic development is taking place and causing the environment to be at risk

#### 2.4 Weather
- Measuring the weather
- Recording the weather

#### 2.5 Climate and natural vegetation
- Equatorial and hot desert climates
- Factors affecting climate
- Tropical rainforests
- Hot deserts
- Impacts of deforestation of the tropical rainforest
- Vegetation distribution in arid areas (e.g.,Death Valley)

**Case Study required for 2.5**
- An area of tropical rainforest
- An area of hot desert

#### 3.2 Food Production
- Agricultural systems
- The influence of natural and human inputs on agricultural land use.

**Case Studies required for 3.2**
- A farm or agricultural system
- A country or region suffering from food shortages

#### 3.6 Water
- The global water crisis
### Skills

#### 3.1 Development

**Candidates should be able to:**
- Use a variety of indicators to assess the level of development of a country
- Identify and explain inequalities between and within countries
- Classify production into different sectors and give illustrations of each
- Describe and explain how the proportions employed in each sector vary according to the level of development
- Describe and explain the process of globalisation, and consider its impacts

**Further guidance**
- Indicators of development (including GNP per capita, literacy, life expectancy and composite indices, e.g. Human Development Index (HDI))
- Primary, secondary, tertiary and quaternary sectors
- Use of indicators of development and employment structure to compare countries at different levels of economic development and over time
- The role of technology and transnational corporations in globalisation along with economic factors which give rise to globalisation Impacts at a local, national and global scale

#### 3.7 Environmental risks of economic development

**Candidates should be able to:**
- Describe how economic activities may pose threats to the natural environment and people, locally and

**Further guidance**
- Methods of water supply
- How water uses varies
- Water shortages
- Water management

### Paper 2: Map skills.

- Latitude and longitude
- Grid references
- Scale
- Use of key
- Height on maps/ contours/relief
- Drainage patterns and density
- Cross sections

#### 2.4 Weather

**Candidates should be able to:**
- Describe how weather data are collected
- Make calculations using information from weather instruments Use and interpret graphs and other diagrams showing weather and climate data

**Further guidance**
- Describe and explain the characteristics, siting and use made of a Stevenson Screen Rain gauge, maximum-minimum thermometer, wet-and-dry bulb thermometer (hygrometer), sunshine recorder, barometer, anemometer and wind vane, along with simple digital instruments which can be used for weather observations;
- observations of types and amounts of cloud

#### 2.5 Climate and Natural vegetation

**Candidates should be able to:**
- Describe and explain the characteristics of two climates:
  - equatorial
  - hot desert
- Describe and explain the characteristics of tropical rainforest and hot desert ecosystems
- Describe the causes and effects of deforestation of tropical rainforest

**Further guidance**
- Climate characteristics (including temperature [mean temperature of the hottest month, mean temperature of the coolest month, annual range]; and precipitation
<table>
<thead>
<tr>
<th>Paper 2 Mapskills</th>
<th>3.2 Food Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Globally demonstrate the need for sustainable development and management</td>
<td>Candidates should be able to:</td>
</tr>
<tr>
<td>- Understand the importance of resource conservation</td>
<td>- Describe and explain the main features of an agricultural system: inputs, processes and outputs</td>
</tr>
<tr>
<td>Further guidance</td>
<td>- Recognise the causes and effects of food shortages and describe possible solutions to this problem</td>
</tr>
<tr>
<td>- Threats to the natural environment (including soil erosion, desertification, enhanced global</td>
<td>Further guidance</td>
</tr>
<tr>
<td>- Linking human actions to the environment</td>
<td>- Farming types: commercial and subsistence; arable, pastoral and mixed; intensive and extensive</td>
</tr>
<tr>
<td>Paper 2 Mapskills</td>
<td>- The influence of natural and human inputs on agricultural land use (including natural inputs [relief, climate and soil] and human inputs [economic and social]).</td>
</tr>
<tr>
<td>- Locating places on maps</td>
<td>- Their combined influences on the scale of production, methods of organisation and the products of agricultural systems</td>
</tr>
<tr>
<td>- Use of atlases</td>
<td>- Natural problems which cause food shortages (including drought, floods, tropical storms, pests) and economic and political factors (including low capital investment, poor distribution/transport difficulties, wars)</td>
</tr>
<tr>
<td>- Coordinates - 6 figure grid references</td>
<td>- The negative effects of food shortages; the effects of food shortages in encouraging food aid and measures to increase output</td>
</tr>
<tr>
<td>- Measuring distances</td>
<td>3.6 Water</td>
</tr>
<tr>
<td>- Interpreting contour patterns</td>
<td>- Factors influencing the characteristics of these climates (including latitude, pressure systems, winds, distance from the sea, altitude and ocean currents)</td>
</tr>
<tr>
<td>- Drawing cross-sections</td>
<td>- Climatic graphs showing the main characteristics of temperature and rainfall of the two climates</td>
</tr>
<tr>
<td></td>
<td>- The relationship in each ecosystem of natural vegetation, soil, wildlife and climate</td>
</tr>
<tr>
<td></td>
<td>- Effects on the natural environment (both locally and globally) and effects on people</td>
</tr>
</tbody>
</table>

### 3.6 Water

- Includes convection and relief rainfall (the amount and seasonal distribution)
- Factors influencing the characteristics of these climates (including latitude, pressure systems, winds, distance from the sea, altitude and ocean currents)
- Climatic graphs showing the main characteristics of temperature and rainfall of the two climates
- The relationship in each ecosystem of natural vegetation, soil, wildlife and climate
- Effects on the natural environment (both locally and globally) and effects on people
Candidates should be able to:
- Describe methods of water supply and the proportions of water used for agriculture, domestic and industrial purposes in countries at different levels of economic development
- Explain why there are water shortages in some areas and demonstrate that careful management is required to ensure future supplies

Further guidance
- Methods of water supply (including reservoirs/dams, wells and boreholes, desalination)
- The impact of lack of access to clean water on local people and the potential for economic development

<table>
<thead>
<tr>
<th>Methods of Assessment</th>
<th>Candidates should be able to:</th>
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<tbody>
<tr>
<td></td>
<td>● Description and analysis of graphs and data</td>
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<tr>
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<tr>
<td></td>
<td>● Case studies</td>
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<td></td>
<td>● Map skills assessments</td>
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<td></td>
<td>● Past paper questions</td>
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<tr>
<td></td>
<td>● Writing case studies - framework</td>
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</tbody>
</table>

Term 4

Topic and Content

2.3 Coasts
- Marine processes
- Landscapes of erosion
- Deposition
- Sand dunes
- Coral reefs
- Coastal hazards and opportunities
- Tropical storms
- Impacts of hurricanes

Case Study required for 2.3
- The opportunities presented by an area or areas of coastline, the associated hazards and their management

3.3 Industry

Revision

Practise past papers

Preparation for external examination (usually early may)
## Industrial systems and types
- Factors affecting the location of industry
- Industrial agglomeration

### Case Study required for 3.3
- An industrial zone or factory

## Energy
- Non-renewable and renewable energy supplies
- The benefits and disadvantages of nuclear power and renewable energy

### Case Study required for 3.5
- Energy supply in a country or area

### Skills

#### 2.3 Coasts
**Candidates should be able to:**
- Demonstrate an understanding of the work of the sea and wind in eroding, transporting and depositing
- Describe and explain the formation of the landforms associated with these processes
- Describe coral reefs and mangrove swamps and the conditions required for their development
- Demonstrate an understanding that coasts present hazards and offer opportunities for people
- Explain what can be done to manage the impacts of coastal erosion

**Further guidance**
- Cliffs, wave-cut platforms, caves, arches, stacks, stumps, bay and headland coastlines, beaches, spits, and coastal sand dunes
- Hazards (including coastal erosion and tropical storms)

#### 3.3 Industry
**Candidates should be able to:**
- Demonstrate an understanding of an industrial system: inputs, processes and outputs (products and waste)
- Describe and explain the factors influencing the distribution and location of factories and industrial
<table>
<thead>
<tr>
<th>zones</th>
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<tbody>
<tr>
<td><strong>Further guidance</strong></td>
</tr>
<tr>
<td>● Industry types: manufacturing, processing, assembly and high technology industry</td>
</tr>
<tr>
<td>● The influence of factors including land, labour, raw materials and fuel and power, transport, markets and political factors</td>
</tr>
<tr>
<td>● Their combined influences on the location, scale of production, methods of organisation and the products of the system Industrial zones and/or factories with respect to locational and siting factors</td>
</tr>
</tbody>
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<thead>
<tr>
<th>3.5 Energy</th>
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<tbody>
<tr>
<td><strong>Candidates should be able to:</strong></td>
</tr>
<tr>
<td>● Describe the importance of non-renewable fossil fuels, renewable energy supplies, nuclear power and fuelwood; globally and in different countries at different levels of development</td>
</tr>
<tr>
<td>● Evaluate the benefits and disadvantages of nuclear power and renewable energy sources</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Further guidance</strong></th>
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</thead>
<tbody>
<tr>
<td>● Non-renewable fossil fuels including coal, oil and natural gas.</td>
</tr>
<tr>
<td>● Renewable energy supplies including geothermal, wind, HEP, wave and tidal power, solar power and biofuels</td>
</tr>
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<td>● Case studies</td>
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<td>● Past paper questions</td>
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<tr>
<td>● End of year assessment</td>
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</tbody>
</table>

**In addition to the above skills, candidates should be able to:**

● add, subtract, multiply and divide
• understand map scale and the use of the scale line and representative fractions
• understand the terms mean and range
• use averages, decimals, fractions, percentages and ratios
• use standard notation, including both positive and negative indices
• understand significant figures and use them appropriately
• recognise positive and negative relationships shown by scatter graphs
• draw and interpret graphs from given data for the types of graph listed in the syllabus
• select suitable scales and axes for graphs
• use a ruler and protractor.

Calculators may be used in all examinations.