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Important information

Accreditation period

Units 1–4: 1 January 2022.

Implementation of this study commences in 2022.

Other sources of information

The [*VCAA Bulletin*](https://www.vcaa.vic.edu.au/news-and-events/bulletins-and-updates/bulletin/Pages/index.aspx) is the only official source of changes to regulations and accredited studies. The Bulletin also regularly includes advice on VCE studies. It is the responsibility of each VCE teacher to refer to each issue of the Bulletin. The Bulletin is available as an e-newsletter via   
[free subscription](https://www.vcaa.vic.edu.au/Footer/Pages/Subscribe.aspx) on the VCAA website.

To assist teachers in developing courses, the VCAA publishes online the Advice for teachers, which includes teaching and learning activities for Units 1–4, and advice on assessment tasks   
and performance level descriptors for School-assessed Coursework in Units 3 and 4.

The current [*VCE Administrative Handbook*](https://www.vcaa.vic.edu.au/administration/vce-vcal-handbook/Pages/index.aspx) contains essential information on assessment processes and other procedures.

VCE providers

Throughout this study design the term ‘school’ is intended to include both schools and other   
VCE providers.

Copyright

VCE schools may reproduce parts of this study design for use by teachers. The full [VCAA copyright policy](https://www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx) is available on the VCAA website.

Introduction

Scope of study

The study of Geography allows students to explore, analyse and come to understand the characteristics of places that make up our world. Geographers are interested in key questions concerning places and geographic phenomena: What is there? Where is it? Why is it there? What are the effects of it being there? How is it changing over time? How could, and should, it change in the future? How is it different from other places and phenomena? How are places and phenomena connected?

Students explore these questions through fieldwork, the use of geospatial technologies and investigation of a wide range of secondary sources. These methods underpin the development of a unique framework for understanding the world, enabling students to appreciate its complexity, the diversity and interactions of its environments, economies and cultures, and the processes that helped form and transform these.

Twelve key geographic concepts underpin the study – change, distance, distribution, environment, interconnection, movement, place, process, region, scale, spatial association and sustainability (see [pages 6–8](#Characteristics)). Each area of study utilises these concepts to assist in the observation, description, interpretation, analysis and explanation of geographic phenomena. VCE Geography is designed around two key concepts: change and interconnection, emphasising increasing human interaction with environments, which has had, and continues to have, significant consequences.

VCE Geography enables students to examine natural and human induced phenomena, how and why they change, their interconnections and the patterns they form across the Earth’s surface. In doing so, students develop a better understanding of their own place and its spaces and those in other parts of the world. These spatial perspectives, when integrated with historical, economic, ecological and cultural perspectives, deepen understanding of places and environments, and the human interactions with these.

Rationale

In VCE Geography students develop a range of skills, many of which employ geospatial and digital technologies. Investigative skills develop students’ ability to conduct geographic study and inquiry including the collection of primary data through observation, surveys and fieldwork, and the collection of relevant secondary data and information. Interpretative and analytical skills enable students to interpret information presented in a variety of formats including maps, graphs, diagrams and images. These skills encourage students to critically evaluate information for its validity and reliability. Presentation and communication skills enable students to communicate their knowledge and understanding in a coherent, creative and effective manner, with the use of appropriate geographic terminology. The skills developed in investigation, collection of data, interpretation, analysis and communication of geographic information are enhanced through the use of geospatial technologies, both in the classroom and in the field. The geospatial industry is evolving and students with spatial skills continue to be in high demand, with the potential for a variety of career pathways.

Aims

This study enables students to:

* develop a sense of wonder and curiosity about people, culture and environments throughout the world
* develop knowledge and understanding of geographic phenomena at a range of temporal and spatial scales
* understand and apply geographic concepts to develop their ability to think and communicate geographically, including change, distance, distribution, environment, interconnection, movement, place, process, region, scale, spatial association and sustainability
* develop an understanding of the complexity of natural and human induced geographic phenomena across the Earth’s surface
* develop a range of skills, including the use of geospatial technologies, to assist in analysing information and making informed judgments and decisions about geographic challenges
* understand the importance of VCE Geography in analysing issues and challenges to human welfare and the environment, at a range of scales
* develop an understanding of the role and application of VCE Geography in the planning and management of human welfare and the environment.

Structure

The study is made up of four units:

* Unit 1: Hazards and disasters
* Unit 2: Tourism: issues and challenges
* Unit 3: Changing the land
* Unit 4: Human population: trends and issues

Each unit deals with specific content contained in areas of study and is designed to enable students to achieve a set of outcomes for that unit. Each outcome is described in terms of key knowledge and key skills.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 and Unit 4 as a sequence. Units 1–4 are designed to a standard equivalent to the final two years of secondary education. All VCE studies are benchmarked against comparable national and international curriculum.

Duration

Each unit involves at least 50 hours of scheduled classroom instruction.

Changes to the study design

During its period of accreditation minor changes to the study will be announced in the [*VCAA Bulletin*](https://www.vcaa.vic.edu.au/news-and-events/bulletins-and-updates/bulletin/Pages/index.aspx). The Bulletinis the only source of changes to regulations and accredited studies. It is the responsibility of each VCE teacher to monitor changes and advice about VCE studies published in the Bulletin.

Monitoring for quality

As part of ongoing monitoring and quality assurance, the VCAA will periodically undertake an audit of VCE Geography to ensure the study is being taught and assessed as accredited. The details of the audit procedures and requirements are published annually in the [*VCE Administrative Handbook*](https://www.vcaa.vic.edu.au/administration/vce-vcal-handbook/Pages/index.aspx.aspx). Schools will be notified if they are required to submit material to be audited.

Safety and wellbeing

It is the responsibility of the school to ensure that duty of care is exercised in relation to the health and safety of all students undertaking the study.

During the course of this study students undertake primary research that may involve human participants. The following practices are important to consider for the study of VCE Geography:

* adhering to all protocols for consultation with groups, including Aboriginal and Torres Strait Islander communities
* treating participants with respect
* putting methods in place to prevent harm to participants
* establishing informed consent procedures, including making explicit the purpose, nature and implications of the study
* ensuring participants are aware of their rights, including voluntary participation and withdrawal rights
* ensuring the confidentiality and/or anonymity of participants
* reporting results honestly
* debriefing and making the results available to the participants.

The Commonwealth Office of the Privacy Commissioner at www.privacy.gov.au is an information and advice portal, and includes information on privacy principles and the Privacy Act. Contact the Victorian Aboriginal Education Association Incorporated (VAEAI) for Aboriginal and Torres Strait Islander protocols at www.vaeai.org.au/ and the Faith Communities Council of Victoria at www.faithvictoria.org.au for protocols regarding religious groups.

Employability skills

This study offers a number of opportunities for students to develop employability skills. The *Advice for teachers* companion document provides specific examples of how students can develop employability skills during learning activities and assessment tasks.

Legislative compliance

When collecting and using information, the provisions of privacy and copyright legislation such as the Victorian *Privacy and Data Protection Act 2014* and *Health Records Act 2001*, and the federal *Privacy Act 1988* and *Copyright Act 1968*, must be met.

Child Safe Standards

Schools and education and training providers are required to comply with the Child Safe Standards made under the Victorian *Child Wellbeing and Safety Act 2005*. Registered schools are required to comply with *Ministerial Order No. 870 Child Safe Standards – Managing the Risk of Child Abuse in Schools*. For further information, consult the websites of the [Victorian Registration and Qualifications Authority](https://www.vrqa.vic.gov.au/childsafe/Pages/Home.aspx), the [Commission for Children and Young People](https://ccyp.vic.gov.au/) and the [Department of Education and Training](https://www2.education.vic.gov.au/pal/child-safe-standards/policy).

Assessment and reporting

Satisfactory completion

The award of satisfactory completion for a unit is based on the teacher’s decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Demonstration of achievement of outcomes and satisfactory completion of a unit are determined by evidence gained through the assessment of a range of learning activities and tasks.

Teachers must develop courses that provide appropriate opportunities for students to demonstrate satisfactory achievement of outcomes.

The decision about satisfactory completion of a unit is distinct from the assessment of levels of achievement. Schools will report a student’s result for each unit to the VCAA as S (satisfactory) or N (not satisfactory).

Levels of achievement

Units 1 and 2

Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators.

Units 3 and 4

The VCAA specifies the assessment procedures for students undertaking scored assessment in Units 3 and 4. Designated assessment tasks are provided in the details for each unit in the VCE study designs.

The student’s level of achievement in Units 3 and 4 will be determined by School-assessed Coursework (SACs) as specified in the VCE study design, and external assessment.

The VCAA will report the student’s level of achievement on each assessment component as a grade from A+ to E or UG (ungraded). To receive a study score the student must achieve two or more graded assessments in the study and receive an S for both Units 3 and 4. The study score is reported on a scale of 0–50; it is a measure of how well the student performed in relation to all others who took the study. Teachers should refer to the current [*VCE Administrative Handbook*](https://www.vcaa.vic.edu.au/administration/vce-vcal-handbook/Pages/index.aspx)for details on graded assessment and calculation of the study score. Percentage contributions to the study score in VCE Geography are as follows:

* Unit 3 School-assessed Coursework: 25 per cent
* Unit 4 School-assessed Coursework: 25 per cent
* end-of-year examination: 50 per cent.

Details of the assessment program are described in the sections on Units 3 and 4 in this study design.

Authentication

Work related to the outcomes of each unit will be accepted only if the teacher can attest that, to the best of their knowledge, all unacknowledged work is the student’s own. Teachers need to refer to the current [*VCE Administrative Handbook*](https://www.vcaa.vic.edu.au/administration/vce-vcal-handbook/Pages/index.aspx) for authentication rules and strategies.

Characteristics of the study

This section contains information on the methods underpinning the study.

1. Key geographical concepts
2. Geographical skills
3. Geospatial technologies
4. Fieldwork report.

1. Key geographical concepts

Twelve key geographical concepts underpin VCE Geography. Teachers should ensure that, when undertaking the units, students develop the ability to select, use and apply the following concepts to assist in their observations, descriptions, interpretations, analyses and explanations of phenomena.

Change

Phenomena studied geographically are dynamic. Change can occur at varying rates, at different times, over varying durations, and at different scales. Change may be unevenly distributed and therefore affects the spatial patterns, geographic features and the use of places differently. Understanding phenomena can involve investigating change that has led to the development of the phenomena and investigating recent observable change, and predicting change into the future, which may identify what would be needed to achieve preferred futures.

Distance

Distance may be considered in several ways. Absolute or linear distance is measured in units such as metres and kilometres. Relative distance considers other factors, for example the length of time it takes to travel from one location to another, the costs involved, or the convenience of the journey. Psychological distance refers to the way people perceive distance; for example, as familiarity with a place increases, it seems closer, while less familiar places seem more distant. Cultural distance relates to the degree of similarity or difference in attitudes and social norms; for example, countries such as Australia and the United Kingdom are distant in absolute terms, but may be perceived as close in terms of cultural distance.

Distribution

Distribution is the arrangement of phenomena in space or time. The factors affecting distribution and the effects distributions have on other phenomena are investigated. Spatially, geographers identify distribution patterns, for example in the organisation, arrangements and densities of phenomena. Examples of distributions include the range of vegetation type, population numbers across a region, or types of land uses. In VCE Geography, temporal distributions can also be investigated, for example the frequency of natural disasters over a period of time.

Environment

The environment comprises the living and non-living physical elements and social conditions of the Earth’s surface and atmosphere. The natural environment includes weather and climate, landforms, water features, natural vegetation and soils. The human, social and cultural environment includes surroundings made by people or human-made influences such as settlements, transport routes and nodes, farmlands, and social and political organisations.

Interconnection

The concept of interconnection emphasises that no object of geographical study can be viewed in isolation. It is about the ways that geographical phenomena are connected to each other through environmental processes, the movement of people, flows of trade and investment, the purchase of goods and services, cultural influences, the exchange of ideas and information, political power and international agreements. Interconnections can be complex, reciprocal or interdependent, and have a strong influence on the characteristics of places. An understanding of the significance of interconnection leads to holistic thinking and helps students to see the various aspects of geography as connected rather than as separate bodies of knowledge.

Movement

Movement is the change or expansion in location of one or more phenomena from its original location to a new location. The concept of movement includes consideration of its nature, distance, direction, method, frequency, volume and magnitude. Flows showing direction and/or quantity of movement can be mapped and analysed. Movement may, for example, involve flows of water, air, goods and people, or the transmission of ideas, energy and disease.

Place

Places are parts of the Earth’s surface that are identified and given meaning by people. They may be perceived, experienced, understood and valued differently. They range in size from a part of a room or garden to a major world region. They can be described by their location, shape, boundaries, features and environmental and human characteristics. Some characteristics are tangible, for example landforms and people, while others are intangible, for example scenic quality and culture. Each place is unique in its characteristics. As a consequence, the outcomes of similar environmental and socioeconomic processes vary in different places, and similar problems may require different strategies in different places. Places can be identified by their absolute or relative locations. Absolute location refers to a specific point on the Earth’s surface expressed by co-ordinates, such as latitude and longitude. Relative location is expressed as a distance and direction from one place to another.

Process

A process is an identifiable series of actions or steps leading to change or preservation of phenomena, or which assist in developing an understanding of what creates, changes and sustains phenomena. Examples of processes are erosion, atmospheric and ocean circulation, disease transmission, urban development and globalisation.

**Region**

Region is a definable area of the Earth’s surface that contains one or more common characteristics that distinguish it from neighbouring areas. Regions are based on selected common characteristics and defined at different scales; for example, the intertidal region of a coastal place, a suburb such as Frankston (local), Gippsland (within a state), the Australian Alps of Victoria and New South Wales (within a country) or South-east Asia (extending over a number countries). Geographers use region to identify a context, to differentiate characteristics and to aid decision-making.

Scale

Scale has two related meanings in geography: map scale and observational scale. Map scale shows the relationship between measurements on a map and the actual measurements on the ground. Observational scale is conceptual and refers to the relative size of phenomena and to the size of the area or areas being studied – local, regional, national, international and global. This concept of scale is used to analyse phenomena and look for explanations at different spatial levels. Different factors can be involved in explaining phenomena at different scales, for example, in studies of vegetation, climate is the main factor at the global scale, but soil and drainage may be the main factors at the local scale. Deciding on the appropriate scale for an inquiry is therefore important. Scale is also involved when seeking explanations or outcomes at different levels. Local events can have global outcomes, for example the effects of local actions such as local carbon dioxide production on global climate. National and regional changes can also have local outcomes, as in the effects of economic policies on local economies. Scale, however, may be perceived differently by diverse groups of people and organisations and can be used to elevate or diminish the significance of an issue, for example, by labelling it as local or global.

Spatial association

Spatial association is the degree to which two or more phenomena are similarly arranged over space. Spatial association compares distribution patterns and the interconnections between them; for example, the distribution of high altitude and vegetation communities such as alpine tundra.   
A strong spatial association occurs where the distribution of two phenomena are very similar.   
On the contrary, weak spatial associations mean there is little similarity between the distribution   
of phenomena.

Sustainability

Sustainability is the capacity of the environment to continue to support life. The consideration of sustainability is used to frame questions, evaluate the findings of investigations, guide decisions and plan actions about environments, places and communities. An understanding of sustainability involves a study of the environmental processes that may produce degradation of an environmental function; the human actions that may have initiated these processes; and the attitudinal, demographic, social, economic and political causes of these human actions.

2. Geographical skills

The table below identifies skills to be incorporated into learning across Units 1 to 4.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Description** | **Unit application** | | | |
| **1** | **2** | **3** | **4** |
| Block diagrams, digital  terrain models/landscape visualisation | Analyse and annotate block diagrams of landscapes to illustrate understanding  of features and processes | • |  | • |  |
| Interpret time series block diagrams that demonstrate change | • |  | • |  |
| Use three-dimensional landscape visualisation tools in conjunction with maps  to investigate representations of topography in two- and three-dimensions | • |  | • |  |
| Cartography – map creation | Use border, orientation, legend, title, scale, source (BOLTSS) conventions when creating or completing a map | • | • | • | • |
| Sketch a representation of what can be observed from a vantage point (in the field or from an image), considering foreground, middle ground and background (proportions and features), adding relevant annotations, orientation, scale, time  and location | • | • | • |  |
| Use of both primary data collected in the field and secondary data from online databases to create maps and map layers using geospatial technologies. These maps should be at an appropriate scale and follow geographic conventions | • | • | • |  |
| Coordinate systems | Recognise and use latitude and longitude to locate places in an atlas or on other maps with degree and minute precision | • | • | • | • |
| Recognise and use four-figure area referencing on a topographic map (Eastings  and Northings) | • | • | • | • |
| Recognise and use six-figure grid references on topographic maps to locate, identify and/or interpret features (Eastings and Northings) | • | • | • | • |
| Cross-sections | Use contour data to create a cross-section on a provided set of axes | • |  | • |  |
| Analyse and annotate cross-sections with natural features and human activities,  as appropriate | • | • | • |  |
| Direction | Understand and use the intermediate sixteen compass points | • | • | • | • |
| Analysing geospatial information | Create simple layers/overlays of data on a map or diagram | • | • | • | • |
| Use layers/overlays to illustrate and assist with the analysis of spatial relationships | • | • | • | • |
| Use a GIS platform to interpret and analyse geospatial information by adding and removing layers of data and viewing at different scales | • | • | • | • |

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| **Skill** | **Description** | **Unit application** | | | |
| **1** | **2** | **3** | **4** |
| Global Navigation Satellite System (GNSS) | Use a GNSS receiver or other device to collect in the field, recognise and interpret primary data, including the use of GPS coordinates | • | • | • |  |
| Images | Use satellite images and oblique and vertical aerial photographs to interpret and draw conclusions from observed features and to describe relative locations of features and general spatial patterns | • | • | • | • |
| Use a provided or an estimated scale on a vertical aerial photograph and on a satellite image to establish distances and areas | • | • | • | • |
| Create generalised maps using satellite images as a source | • | • | • | • |
| Map use, interpretation and analysis | Compare and interpret different map types (including more specialised complex maps), and scales and maps from different time periods, for the same area to draw accurate conclusions | • | • | • | • |
| Use parallels of latitude and meridians of longitude and name major parallels and meridians (e.g. Equator, Prime Meridian, Tropics, polar Circles, International Date Line) to describe location | • | • | • | • |
| Use representative fraction/ratio scales to measure distances on maps and  estimate areas on a topographic map using a grid square | • | • | • | • |
| Use topographic maps in the field to identify locations, routes and features | • | • | • |  |
| Use combinations of remote sensing images and topographic maps to explain change over time | • | • | • | • |
| Compare maps with three-dimensional landscape visualisations to assist with analysis | • |  | • |  |
| Interpret isopleth maps of continuous distribution (e.g. topographic/contour maps  or precipitation maps), noting the interval used | • | • | • | • |
| Interpret choropleth and thematic maps to determine patterns, or multiple choropleth and thematic maps to ascertain, for example, change or spatial association | • | • | • | • |

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| --- | --- | --- | --- | --- | --- | --- |
|  | **Skill** | **Description** | **Unit application** | | | |
| **1** | **2** | **3** | **4** |
| Mathematics | Number operations | Calculate and interpret percentages, ratios, mean and median | **•** | **•** | **•** | **•** |
| Graphs | Select, construct and interpret line graphs, bar graphs (simple, comparative, compound and divergent) and pie charts | **•** | **•** | **•** | **•** |
| Interpret scatter graphs (and best fit line), proportional divided circles, logarithmic scales and flow diagrams | **•** | **•** | **•** | **•** |
| Interpret specialised graph types (e.g. climate graph, population pyramid)  Observe and describe trends in graphed time series data in accurate language | **•** | **•** | **•** | **•** |
| Ranking | Determine a ranking based on relevant criteria that may involve relative weighting | **•** | **•** | **•** | **•** |
| Tables of data | Assess available data to construct a suitable table that facilitates clarity and ease of interpretation | **•** | **•** | **•** | **•** |
| Interpret tables of data to determine trends and to identify significant data | **•** | **•** | **•** | **•** |
| **Skill** | **Description** | |  | | | |
| Source and data assessment | Reflect on the validity and reliability of data and information and their sources | | **•** | **•** | **•** | **•** |
| Social surveys and interviews | Consider sample size, location/s of surveying and times and durations of surveying  in design of survey and analysis of results | | **•** | **•** | **•** |  |
| Design and construct survey questionnaires or interview questions for a given purpose | | **•** | **•** | **•** |  |
| Undertake surveys and/or interviews with potential for open responses and qualitative recording | | **•** | **•** | **•** |  |
| Transects | Observe, measure and construct an annotated transect over a small distance  (e.g. coastal vegetation transition or land uses across an urban area) | | **•** |  | **•** |  |
| Analyse transects to identify significant features, patterns or change | | **•** |  | **•** |  |

3. Geospatial technologies

Geospatial technologies are tools used to acquire, manipulate, manage, represent and analyse data that has a spatial context. The term refers to tools such as Global Navigation Satellite Systems (GNSS), Geographic Information Systems (GIS) and remote sensing.

Geospatial technologies allow students to:

* acquire and record spatial information
* manipulate and manage spatial information in its various forms
* represent spatial information in a variety of formats such as thematic maps
* analyse spatial information for trends, patterns and relationships.

The uses of geospatial technology tools, including GNSS, GIS and remote sensing, are required skills in each of the units of study, including fieldwork. Geospatial technologies provide opportunities for students to utilise various types of technologies to answer geographical questions. In this study, students are expected to collect primary data in the field, represent both primary and secondary data using various GIS mapping tools, and analyse geospatial information for trends, patterns and relationships as part of the fieldwork report. Geospatial technologies can also be used to represent and analyse secondary data collected from online databases. Students utilise a variety of remotely sensed images, particularly to look at patterns and change over time. The collection of primary data during fieldwork, as well as the representation and mapping of both primary and secondary data, can be achieved using tools that are online and readily available to all students.

4. Fieldwork report

Students undertake fieldwork in Units 1, 2 and 3. Students produce one fieldwork report of approximately 1500–2000 words for assessment in each of Units 1, 2 and 3. Students will use the following structure in their fieldwork reports.

|  |  |
| --- | --- |
| **Report section** | **Guidelines** |
| Definition of topic | A **definition of topic** contains:   * A clear statement of the research question * An outline of the geographic context of the question * A brief hypothesis (expected answer to the research question) and justification of hypothesis |
| Primary sources and techniques used to collect data | An outline of **Primary sources used and techniques used to collect data** indicates:   * A brief description of the sources and techniques used to collect primary data. Fieldwork techniques must include the use of geospatial technologies, through the use of GNSS, to indicate what primary data was collected at specific locations * A justification of how the combination of primary sources and techniques were used to help answer the research question |
| Secondary sources and techniques used to collect data | An outline of the **Secondary sources** **and techniques used to collect data** indicates:   * A brief description of the sources used, including secondary data from online databases  (e.g. Australian Bureau of Statistics, Atlas of Living Australia) * A justification of how the combination of secondary sources and techniques were used to help answer the research question |
| Presentation of processed data and information | The **Presentation** **of processed data and information** uses:   * Appropriate conventions * Techniques most appropriate to the meaning conveyed by the data and information * Geospatial technologies, through the use of GIS mapping, to create maps from primary data collected in the field and/or secondary data from online databases to answer the research question * Correct sourcing of the data and information |
| Analysis of processed data and information | An **Analysis** **of processed data and information** should:   * Identify key features * Describe patterns identified in the processed data and information * Draw relationships between key features and patterns in the processed data and information * Relate back to the research question and discuss whether or not the data and information has supported the hypothesis |
| Conclusion | A **Conclusion** should:   * Identify the extent to which the analysis has answered the research question * Note any specific points to be learnt from the investigation |

|  |  |
| --- | --- |
| **Report section** | **Guidelines** |
| Evaluation | An **Evaluation** considers:   * The relative effectiveness (limitations and weaknesses) of the techniques implemented and sources used * Future possibilities for any subsequent investigation |
| Referencing | **Referencing** includes:   * Bibliography with correct and consistent referencing * Acknowledgement of sources of information and people |

Unit 1: Hazards and disasters

This unit investigates how people have responded to specific types of hazards and disasters. Hazards represent the potential to cause harm to people and or the environment, whereas disasters are defined as serious disruptions of the functionality of a community at any scale, involving human, material, economic or environmental losses and impacts. Hazards include a wide range of situations including those within local areas, such as fast-moving traffic or the likelihood of coastal erosion, to regional and global hazards such as drought and infectious disease.

Students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them.

Students examine the processes involved with hazards and hazard events, considering their causes and impacts, human responses to hazard events and the interconnections between human activities and natural phenomena, including the impact of climate change.

Types of hazards are commonly classified by their causes:

* geological (or geophysical) hazards include volcanic activity, erosion, earthquakes, tsunamis, landslides and avalanches
* hydro-meteorological (weather, climate, water) hazards include droughts, floods, storms, storm surges and bushfires
* biological hazards include infectious diseases such as HIV/AIDS and malaria, animal transmitted diseases, water borne diseases, and plant and animal invasion such as blackberries and cane toads in Australia
* technological hazards are human induced and exacerbated hazards including oil spills, air pollution, radiation leaks, flooding primarily caused by land clearances, epidemics caused by poor living conditions and hazards caused by current climate change such as rising sea levels or increased intensification of weather events.

There may be considerable interconnection between the causes and types of hazards. For example, a region may be at risk from a number of hazards: high seasonal rainfall may result   
in a primary flood hazard which may in turn generate a secondary hazard of landslides.

Students undertake fieldwork and produce a fieldwork report using the structure provided   
(see [pages 13 and 14](#Fieldwork)).

Area of Study 1

Characteristics of hazards

In this area of study students examine hazards and hazard events, and analyse the impacts of hazard events. They study at least two specific hazards at different scales. Students select one hazard from at least two different types of hazards listed above, for example, coastal hazards and an alien animal invasion, or floods and oil spills. The selection of hazards should allow students to use visual representations and topographical maps at various scales and to undertake fieldwork.

Outcome 1

On completion of this unit the student should be able to analyse the nature of hazards and the impacts of hazard events at a range of scales.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

Key knowledge

* the classification of types of hazards by their causes and the interconnections between causes
* an overview of hazards such as their global distribution, location, scale, frequency, sequence and magnitude, and their role in natural systems
* the nature of at least two selected hazards:
* the physical causes
* the location, scale, frequency, sequence, magnitude
* the role of human activity in initiating and/or compounding the selected hazards and how this has changed over time
* the economic, social, political, environmental and cultural factors affecting the risk level for people, places and environments
* the environmental, economic, social and cultural impacts of the selected hazards and hazard events on people and environments
* the spatial association of these factors and impacts and how they are interconnected
* the potential and realised positive and negative impacts on people and environments   
  in the short and long term
* comparison with similar hazards in other parts of the world
* the interconnection between the physical environment and human activities, including the impact of climate change
* applications of geospatial technologies by agencies in identification and assessment of impacts of hazards and hazard events.

Key skills

* collect, sort and process primary and secondary data using appropriate methods from fieldwork, including the use of geospatial technologies
* interpret and analyse primary and secondary sources including maps, using appropriate methods such as Geographic Information Systems (GIS) and remote sensing, to develop descriptions and explanations
* identify contrasting hazards and hazard types
* describe the characteristics of selected hazards
* describe and explain the causes, sequence and impacts of hazards and hazard events
* evaluate the role of geospatial technologies in identification and assessment of the impacts   
  of hazards and hazard events.

Area of Study 2

Response to hazards and disasters

In this area of study students distinguish between a hazard and a hazard event, which can   
result in a disaster depending on its impact and interconnections. They explore the nature   
and effectiveness of specific measures such as prediction and warning programs, community preparedness and land use planning, as well as actions taken after hazards become harmful   
and destructive disasters. Students consider natural and human factors influencing the nature

of responses, considering the scale of the hazard, levels of risk due to hazards, past experiences and perceptions of similar hazards and hazard events, the capacity of government organisations and communities to act, issues and challenges that arise from responses to hazards and hazard events, available technological resources and the ability to plan and develop effective prevention and mitigation measures. Students investigate the responses to the hazards selected in Area of Study 1, with reference to a variety of locations.

Outcome 2

On completion of this unit the student should be able to analyse and evaluate the nature, purpose and effectiveness of a range of responses to selected hazards and disasters.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

Key knowledge

* economic, social, political, environmental and cultural factors influencing responses to selected hazards and disasters
* the nature and importance of spatial association and interconnections between natural processes and human activities in developing responses to selected hazards and disasters
* the types of responses to selected hazards and disasters, such as prediction of risk and vulnerability, planning protection and mitigation, recovery and reconstruction
* specific responses by national and global organisations regarding prediction, planning, recovery and reconstruction to similar hazards and disasters in other parts of the world
* responses to selected hazards and disasters, and the issues and challenges that can arise as a result of these responses, and how their effectiveness can be measured
* the role of geospatial technologies in management of responses to selected hazards and disasters.

Key skills

* collect, sort, process and represent data and other information
* interpret and analyse maps, data and other geographic information to develop descriptions and explanations
* describe and explain the nature and purpose of responses to hazards and disasters
* describe and explain issues and challenges that arise from responses to hazards and disasters
* evaluate the effectiveness of responses to specific hazards and disasters in a variety of locations
* evaluate the usefulness of geospatial technologies in developing effective prevention and mitigation measures in response to the selected hazards and disasters.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks that provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study, including the key knowledge and key skills listed for the outcomes, should be used for course design and the development of learning activities and assessment tasks. Assessment must be a part of the regular teaching and learning program and should be completed mainly in class and within a limited timeframe.

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

The core assessment task for Outcome 1 is a fieldwork report of approximately 1500–2000 words (for further information see [pages 13 and 14](#Fieldwork)).

Additionally, at least one task for the assessment of each of Outcomes 1 and 2 is to be selected from the following:

* structured questions
* a case study
* a research report
* analysis of geographic data
* a multimedia presentation.

Where teachers allow students to choose between tasks they must ensure that the tasks they set are of comparable scope and demand.

Unit 2: Tourism: issues and challenges

In this unit students investigate the characteristics of tourism: where it has developed, its various forms, how it has changed and continues to change and its impact on people, places and environments, issues and challenges of ethical tourism. Students select contrasting examples of tourism from within Australia and elsewhere in the world to support their investigations. Tourism involves the movement of people travelling away from and staying outside of their usual environment for more than 24 hours but not more than one consecutive year (United Nations World Tourism Organization definition). The scale of tourist movements since the 1950s and its predicted growth has had and continues to have a significant impact on local, regional and national environments, economies and cultures. The travel and tourism industry is directly responsible for a significant number of jobs globally and generates a considerable portion of global GDP.

The study of tourism at local, regional and global scales emphasises the interconnection within and between places as well as the impacts, issues and challenges that arise from various forms of tourism. For example, the interconnections of climate, landforms, culture and climate change help determine the characteristics of a place that can prove attractive to tourists. There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, and cultural preservation and acculturation. The growth of tourism at all scales requires appropriate management to ensure it is environmentally, socially, culturally and economically sustainable.

Students undertake fieldwork and produce a fieldwork report using the structure provided   
(see [pages 13 and 14](#Fieldwork)).

Area of Study 1

Characteristics of tourism

In this area of study students examine the characteristics of tourism, the location and distribution   
of different types of tourism and tourist destinations, and the factors affecting different types of tourism. Students support this investigation with contrasting examples from within Australia and elsewhere in the world. They investigate in detail at least one tourism location using appropriate fieldwork techniques, and one other location elsewhere in the world. The selection of examples should allow students to work with a range of information sources, for example statistical data, digital images, streamed video, geospatial technologies and a variety of maps at various scales,   
as well as to undertake fieldwork.

Outcome 1

On completion of this unit the student should be able to analyse the nature of tourism at a range   
of scales.

To achieve this outcome the student will draw on the key knowledge and key skills outlined in   
Area of Study 1 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

Key knowledge

* the location and distribution of different types of tourism and tourist destinations
* the characteristics of domestic and international tourism
* the characteristics of ethical tourism
* the changing characteristics of tourism over time
* the economic, social, political, environmental and cultural factors affecting the different types   
  of tourism at selected locations from two different parts of the world, such as:
* natural and human characteristics of host destinations
* development of transport and communication infrastructure
* international agreements and national policies
* changing income and lifestyles
* investment and marketing
* regional occurrences, for example major events, disasters, diseases, and economic   
  and political situations
* the spatial association between factors affecting different types of tourism
* the use of geospatial technologies by the tourism industry.

Key skills

* collect, sort, process and represent data and other information
* interpret and analyse maps, data and other geographic information using appropriate methods
* identify the characteristics of tourism
* describe and explain the different types of tourism and tourist locations and destinations
* describe and explain the factors affecting different types of tourism
* describe the changing sources and destinations of different types of tourism
* evaluate the usefulness of geospatial technologies for the tourism industry.

Area of Study 2

Impact of tourism: issues and challenges

In this area of study students explore the environmental, economic, social and cultural impacts   
of different types of tourism, and the issues and challenges that these create for people and the environment. They investigate at least one tourism location using appropriate fieldwork techniques, and one location elsewhere in the world that requires an investigation of ethical tourism. Students evaluate the effectiveness of measures taken to enhance the positive impacts and/or to minimise the negative impacts at these locations. This fieldwork site could be the same fieldwork site explored in Area of Study 1. They investigate the interconnection of the two selected locations with their surrounding region and national context.

Outcome 2

On completion of this unit the student should be able to analyse the impacts of tourism on people, places and environments, and evaluate the effectiveness of strategies for managing tourism.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area   
of Study 2 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

**Key knowledge**

* the environmental, economic, social and cultural impacts of tourism at a range of locations and spatial and temporal scales
* the environmental, social, cultural and economic sustainability of tourism at a range of scales
* the issues and challenges for people and the environment that occur due to these impacts, including climate change
* the role of planning in managing sustainable outcomes in tourism
* the range of management strategies responding to environmental, economic, social and cultural impacts, including ethical tourism
* the effectiveness of management strategies in response to the impacts of tourism, including ethical tourism.

Key skills

* identify and explain the types of tourism impacts at a range of locations and scales
* describe the range of management strategies linked to tourism
* collect, sort and process primary and secondary data using appropriate methods from fieldwork, including the use of geospatial technologies
* interpret and analyse primary and secondary sources including maps, using appropriate methods such as Geographic Information Systems (GIS) and remote sensing
* evaluate the effectiveness of management strategies and consider their consequences, in relation to environmental, social, cultural and economic sustainability of tourism, including ethical tourism.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks that provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study, including the key knowledge and key skills listed for the outcomes, should   
be used for course design and the development of learning activities and assessment tasks. Assessment must be a part of the regular teaching and learning program and should be completed mainly in class and within a limited timeframe.

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

The core assessment task for Outcome 2 is a fieldwork report of approximately 1500–2000 words (for further information see [pages 13 and 14](#Fieldwork)).

Additionally, at least one task for the assessment of each of Outcomes 1 and 2 is to be selected from the following:

* structured questions
* a case study
* a research report
* analysis of geographic data
* a multimedia presentation.

Where teachers allow students to choose between tasks they must ensure that the tasks they set are of comparable scope and demand.

Unit 3: Changing the land

This unit focuses on two investigations of geographical change: change to land cover and change to land use. Land cover includes biomes such as forest, grassland, tundra, bare lands and wetlands, as well as land covered by ice and water. Land cover is the natural state of the biophysical environment developed over time as a result of the interconnection between climate, soils, landforms and flora and fauna and, increasingly, interconnections with human activity. Natural land cover is altered by many processes such as geomorphological events, plant succession and climate change.

Students investigate two major processes that are changing land cover in many regions of the world: melting glaciers and ice sheets, and deforestation.

They investigate the distribution and causes of the two processes. They select one location for each of the processes to develop a greater understanding of the changes to land cover produced by these processes, the impacts of these changes and responses to these changes at different scales.

People have modified land cover to produce a range of land uses to satisfy needs such as housing, resource provision, communication and recreation. Land use change is a characteristic of both urban and rural environments and occurs at both spatial and temporal scales.

At a local scale students investigate land use change using appropriate fieldwork techniques and secondary sources. They investigate the processes of change, the reasons for change and the impacts of change.

Students undertake fieldwork and produce a fieldwork report using the structure provided   
(see [pages 13 and 14](#Fieldwork)). They develop a research question and hypothesis and use both primary and secondary sources to collect data. Fieldwork techniques including geospatial technologies are employed to collect and present data.

Area of Study 1

Land cover change

In this area of study students undertake an overview of global land cover and changes that have occurred over time. Students investigate two major processes that are changing land cover: melting glaciers and ice sheets, and deforestation. They analyse these processes, explain their impacts on land cover and discuss responses to these land cover changes in two different locations in the world – one location for each process. Students evaluate two different global responses to the impacts of land cover change, one global response for each process.

Outcome 1

On completion of this unit the student should be able to analyse processes that result in changes to land cover and evaluate the impacts and responses resulting from these changes.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area   
of Study 1 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

Key knowledge

* the spatial distribution of present-day global land cover, including forest, grassland, tundra, bare lands and wetlands, as well as the land covered by ice and water
* the spatial distribution of land cover on a global scale that was evident during the last Glacial Maximum around 20,000 years ago and the Holocene Climatic Optimum around 8000 years ago and the change in this distribution over time
* the natural characteristics of glaciers and ice sheets, and forests
* the distribution of each of the processes of land cover change on a global scale
* the role, spatial association, and interconnection of natural processes and human activity in causing melting glaciers and ice sheets, and deforestation
* for each of the selected two locations:
* its location within the global distribution of the relevant process
* reasons for current land cover changes
* impacts of the land cover changes on the environment, economic activity and social conditions, and the issues and challenges which result from these impacts
* the use and effectiveness of geospatial technologies to assess and manage land cover changes
* a response to the impacts of these land cover changes at local and national scales
* a global response to the impacts of land cover change resulting from melting glaciers and ice sheets, and deforestation
* the effectiveness or likely effectiveness of the responses to the impact of the change.

Key skills

* collect, sort, process and represent data and other information
* interpret and analyse maps, data and other geographic information
* identify and describe the spatial distribution of the present-day world’s land cover
* compare the spatial distributions of the world’s land cover over time
* describe and analyse the processes and causes of melting glaciers and ice sheets, and deforestation
* analyse the changes to land cover that have occurred as a result of melting glaciers and ice sheets, and deforestation
* evaluate the impacts of the changes to land cover, and consider the issues and challenges which result from these impacts
* evaluate the use and effectiveness of geospatial technologies, including the use of remote sensing, to assess and manage land cover change
* develop and apply appropriate criteria to evaluate the effectiveness or likely effectiveness of responses to the impacts of these changes.

Area of Study 2

Land use change

In this area of study students select a local area and use appropriate fieldwork techniques and secondary sources to investigate the nature, processes and impacts of land use change. This change may have recently occurred, be underway or be planned for the near future.

Outcome 2

On completion of this unit the student should be able to analyse land use change and evaluate   
its impacts.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area   
of Study 2 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

**Key knowledge**

* the location of the selected area, current land use and other natural and human geographic characteristics
* the interconnection of the selected area with its surrounding region
* for the selected land use change, the:
* processes of change involving the nature, scale and time sequence of change
* reasons for change, including consideration of the influence of geographical characteristics of the selected area and surrounding region and the influence of individuals, organisations and planning strategies
* positive and negative impacts of the change on the environment, considering the economic and social conditions in the selected area and surrounding region
* use of geospatial technologies to analyse, assess and manage land use change.

Key skills

* collect, sort and process primary and secondary data using appropriate methods, including   
  the use of geospatial technologies
* interpret and analyse primary and secondary sources including maps, using appropriate methods such as Geographic Information Systems (GIS) and remote sensing
* identify and describe the geographic characteristics of the selected area
* identify and describe the change in land use in the selected area at spatial and temporal scales
* analyse the processes of change, the reasons for change and the resulting land use change   
  in the selected area
* explain and evaluate positive and negative impacts on the selected area and the surrounding region resulting from land use change
* evaluate how the combination of primary and secondary data sources help answer the research question of the fieldwork investigation.

School-based assessment

Satisfactory completion

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks to provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study and key knowledge and key skills listed for the outcomes should be used for course design and the development of learning activities and assessment tasks.

Assessment of levels of achievement

The student’s level of achievement in Unit 3 will be determined by School-assessed Coursework. School-assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Where teachers provide a range of options for the same School-assessed Coursework task, they should ensure that the options are of comparable scope and demand.

The types and range of forms of School-assessed Coursework for the outcomes are prescribed within the study design. The VCAA publishes *Advice for teachers* for this study, which includes advice on the design of assessment tasks and the assessment of student work for a level of achievement.

Teachers will provide to the VCAA a numerical score representing an assessment of the student’s level of achievement. The score must be based on the teacher’s assessment of the performance of each student on the tasks set out in the following table.

Contribution to final assessment

School-assessed Coursework for Unit 3 will contribute 25 per cent to the study score.

|  |  |  |
| --- | --- | --- |
| **Outcomes** | **Marks allocated** | **Assessment tasks** |
| **Outcome 1**  Analyse processes that result in changes to land cover and evaluate the impacts and responses resulting from these changes. | **40** | Analysis of geographic data  and  any one or a combination of the following:   * a research report * a case study * a multimedia presentation. |
| **Outcome 2**  Analyse land use change and evaluate its impacts. | **50**  **10** | Fieldwork report  and  Structured questions. |
| **Total marks** | **100** |  |

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent.

Unit 4: Human population: trends and issues

Students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world.

Students study population dynamics before undertaking an investigation into two significant population trends arising in different parts of the world. They examine the dynamics of populations and their environmental, economic, social, and cultural impacts on people and places.

The growth of the world’s population from 2.5 billion in 1950 to over 7 billion since 2010 has been on a scale without parallel in human history. Much of the current growth is occurring within developing countries while the populations in many developed countries are either growing slowly or are declining.

Populations change through growth and decline in fertility and mortality, and by people moving to different places. The Demographic Transition Model and population structure diagrams provide frameworks for investigating the key dynamics of population.

Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to environmental, economic, social, and cultural conditions. Many factors influence population change, including the impact of government policies, economic conditions, wars and revolution, political boundary changes and hazard events.

Students investigate the interconnections between the reasons for population change. They evaluate strategies developed in response to population issues and challenges, in both a growing population trend of one country and an ageing population trend of another country, in different parts of the world.

Area of Study 1

Population dynamics

In this area of study students undertake an overview of global population distribution and growth before investigating the dynamics of population change over time and space. Through the study of population dynamics, students investigate growth and decline in fertility and mortality, together with population movements. Students study forced and voluntary, and internal and external population movements and how they can be long term or short term. To illustrate the dynamics of population, students examine examples from within and between countries with different economic and political conditions and social structures. Students develop understanding of the Demographic Transition Model and its applications, and the Malthusian theory of population.

Outcome 1

On completion of this unit the student should be able to analyse and discuss population dynamics on a global scale.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area   
of Study 1 and the relevant Characteristics of the study on [pages 6–14](#Characteristics).

Key knowledge

* the spatial distribution of the present-day global population
* the distribution and spatial association of global population characteristics including birth rate, death rate, infant mortality rate, fertility rate and life expectancy
* the change in global population growth since the 1700s and projected changes in the 21st century
* the nature of population structures as a measure of population characteristics at a point in time and over time
* the five-stage Demographic Transition Model and its use in interpreting population structures and other population characteristics
* Malthusian theory and its explanation of population growth and economic, environmental and social sustainability
* the main causes of population change since the 1950s
* the types and causes of population movements and their contribution to population change
* the similarities and differences in population dynamics and population structures within and between countries with different economic and political conditions, and social structures.

Key skills

* collect, sort, process and represent data and other information
* interpret and analyse maps, data and other geographic information
* identify and describe patterns in global population distribution and characteristics, and trends in global population growth
* identify and describe the types and causes of population change
* analyse the causes of population change and consider issues of sustainability
* evaluate the relevance of Malthusian theory as an explanation of population dynamics
* analyse and discuss population dynamics and population structures within and between locations.

Area of Study 2

Population issues and challenges

Students undertake investigations into two countries with significant population trends in different parts of the world: a growing population of one country and an ageing population of another country.

Students place these trends and resulting issues and challenges in their world regional context. Issues resulting from these population trends include, among others, meeting the differing economic and social needs of the people for each country and the needs of the environment. Students investigate issues arising from each population trend and the challenges that arise in coping with the issues. Students study the interconnection between these issues and challenges with population dynamics.

Students evaluate the effectiveness of strategies in response to these issues and challenges. Strategies can be selected from government and/or non-government organisations. Comparison   
of strategies is undertaken within each selected country.

Outcome 2

On completion of this unit the student should be able to analyse the nature of significant population issues and challenges in selected countries and evaluate strategies in response to these.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area   
of Study 2 and the relevant Characteristics of the study detailed on [pages 6–14](#Characteristics).

Key knowledge

* for each selected country:
* the nature of population trends and resulting issues and challenges
* the location and distribution of these issues and challenges within these countries
* the nature of these population trends, issues and challenges in their world regional context
* population movement as a contributing factor to structural change in population
* the interconnections between population dynamics and resulting issues and challenges
* other causes of specific issues and challenges
* the economic, social, political, environmental and cultural factors contributing to the impacts of the issues on people and places
* strategies developed in response to issues and the environmental, economic, social   
  and cultural impacts of these strategies on people and places
* the effectiveness of strategies developed in response to these issues
* the role and effectiveness of geospatial technologies in the development and implementation of strategies in response to population issues.

Key skills

* collect, sort, process and represent data and other information
* interpret and analyse maps, data and other geographic information
* analyse the nature and significance of population issues and challenges
* analyse the causes and impacts of issues and challenges that arise in responding to these issues
* describe and evaluate the strategies developed to respond to population issues and challenges
* develop and apply appropriate criteria to evaluate the effectiveness of strategies developed   
  in response to specific issues
* evaluate the role and effectiveness of geospatial technologies in the development and implementation of strategies in response to population issues.

School-based assessment

Satisfactory completion

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks to provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study and key knowledge and key skills listed for the outcomes should be used for course design and the development of learning activities and assessment tasks.

Assessment of levels of achievement

The student’s level of achievement in Unit 4 will be determined by School-assessed Coursework. School-assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Where teachers provide a range of options for the same School-assessed Coursework task, they should ensure that the options are of comparable scope and demand.

The types and range of forms of School-assessed Coursework for the outcomes are prescribed within the study design. The VCAA publishes *Advice for teachers* for this study, which includes advice on the design of assessment tasks and the assessment of student work for a level of achievement.

Teachers will provide to the VCAA a numerical score representing an assessment of the student’s level of achievement. The score must be based on the teacher’s assessment of the performance   
of each student on the tasks set out in the following table.

Contribution to final assessment

School-assessed Coursework for Unit 4 will contribute 25 per cent to the study score.

|  |  |  |
| --- | --- | --- |
| **Outcomes** | **Marks allocated** | **Assessment tasks** |
| **Outcome 1**  Analyse and discuss population dynamics on a global scale. | **40** | Analysis of geographic data  and  any one or a combination of the following:   * a research report * a case study * a multimedia presentation. |
| **Outcome 2**  Analyse the nature of significant population issues and challenges in selected countries and evaluate strategies in response to these. | **60** | A research report  or  Case studies. |
| **Total marks** | **100** |  |

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination.

Contribution to final assessment

The examination will contribute 50 per cent.

End-of-year examination

Description

The examination will be set by a panel appointed by the VCAA. All the key knowledge and key skills that underpin the outcomes in Units 3 and 4 are examinable.

Conditions

The examination will be completed under the following conditions:

* Duration: two hours.
* Date: end-of-year, on a date to be published annually by the VCAA.
* VCAA examination rules will apply. Details of these rules are published annually in the   
  [*VCE Administrative Handbook*](https://www.vcaa.vic.edu.au/administration/vce-vcal-handbook/Pages/index.aspx).
* The examination will be marked by assessors appointed by the VCAA.

Further advice

The VCAA publishes specifications for all VCE examinations on the VCAA website. Examination specifications include details about the sections of the examination, their weighting, the question format/s and any other essential information. The specifications are published in the first year of implementation of the revised Unit 3 and 4 sequence together with any sample material.