



Government of **Western Australia**  
School Curriculum and Standards Authority

# GEOGRAPHY

ATAR COURSE

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Year 11 syllabus

## **Acknowledgement of Country**

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

## **IMPORTANT INFORMATION**

This syllabus is effective from 1 January 2022.

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## Rationale

The study of geography draws on students' curiosity about the diversity of the world's places and their peoples, cultures and environments. It enables them to appreciate the complexity of our world and the diversity of its environments, economies and cultures and use this knowledge to promote a more sustainable way of life and awareness of social and spatial inequalities.

The Geography ATAR course provides a structured, disciplinary framework to investigate and analyse a range of challenges and associated opportunities facing Australia and the global community. These challenges include dealing with natural and ecological hazards, the impacts of globalisation, rapid change in physical environments and the sustainability of places.

Geography as a discipline values imagination, creativity and speculation as modes of thought. It provides a systematic, integrative way of exploring, analysing and applying the concepts of place, space, environment, interconnection, sustainability, scale and change. These principal geographical concepts are applied and explored in depth through unit topics to provide a deeper knowledge and understanding of the complex processes shaping our world. The ability of students to apply conceptual knowledge in the context of an inquiry, and the application of skills, constitutes 'thinking geographically' – a uniquely powerful way of viewing the world.

Through the study of geography, students develop the ability to investigate the arrangement of physical and human phenomena across space and time in order to understand the interconnections between people, places and environments. As a subject within the Humanities and Social Sciences, geography studies spatial aspects of human culture using inquiry methods that are analytical, critical and speculative. As a science, geography develops an appreciation of the role of the physical environment in human life, and an understanding of the effects human activities can have on environments. As a result, it develops students' ability to identify, evaluate and justify appropriate and sustainable approaches to the future by thinking holistically and spatially in seeking answers to questions. Students are encouraged to investigate geographical issues and phenomena from a range of perspectives, including those of Aboriginal and Torres Strait Islander peoples.

Students learn how to collect information from primary and secondary sources, such as field observation and data collection, mapping, monitoring, remote sensing, case studies and reports. Fieldwork, in all its various forms, is central to geographical inquiries as it enables students to develop their understanding of the world through direct experience.

Students develop a range of skills that helps them to understand the physical world, interpret the past, scrutinise the present, and explore sustainable strategies for the future care of places. They are able to understand recent and future developments, such as hazard risk management, the unequal distribution of resources throughout the world, cultural diffusion, land cover change, urban planning and sustainable development practices.

The Geography ATAR course promotes students' communication abilities by building their skills of spatial and visual representation and interpretation through the use of cartographic, diagrammatic, graphical, photographic and multimodal forms. In addition, students communicate their conclusions by written and oral means.

## Aims

The Geography ATAR course enables students to:

- develop knowledge and understanding of the type, causes, distribution, impacts and management of natural and ecological hazards, globalisation in a range of spatial contexts, land cover change, and the challenges affecting the sustainability of places
- understand and apply the concepts of place, space, environment, interconnection, sustainability, scale and change through inquiries into geographical phenomena and issues
- critically use geographical inquiry methods and skills, and to think and communicate geographically
- identify, evaluate and justify alternative and innovative responses to the geographical challenges facing humanity, and propose and justify actions, taking into account environmental, social and economic factors.

## Organisation

This course is organised into a Year 11 syllabus and a Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12.

### Structure of the syllabus

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The notional time for each unit is 55 class contact hours.

#### Unit 1 – Natural and ecological hazards

In this unit, students explore both natural (i.e. hydrological, geomorphic and atmospheric) hazards and ecological (i.e. biological and chemical) hazards, the impacts they have on people, place and environments and the risk management of these hazards. Risk management is defined in terms of preparedness and mitigation.

#### Unit 2 – Global networks and interconnections

In this unit, students explore the economic and cultural transformations taking place in the world – the diffusion and changing spatial distribution and the impacts of these changes – that will enable them to better understand the dynamic nature of the world in which they live.

Each unit includes:

- a unit description – a short description of the focus of the unit
- unit content – the content to be taught and learned.

### Organisation of content

The content in each unit is divided into an overview and two depth studies. The content descriptions associated with the overview are designed to be taught at a broad level and in a short timeframe. The content descriptions associated with the depth study are designed to be taught in a more focused and detailed way and, therefore, take more time to teach.

The unit content that is listed after 'e.g.' is provided as suggested examples to guide teachers on relevant topics, which could be used to teach the content descriptions; teachers are not restricted to just the listed examples. Unit content that is referred to in a content description after 'including' is examinable content.

The cognitive verb used with each content description sets the upper limit in skill level for that content description. In developing assessment tasks, teachers and the examining panel may use verbs with the same or lower level skill, but not higher.

The Geography ATAR course has two interrelated strands: Geographical Knowledge and Understanding, and Geographical Inquiry and Skills. The organisation of the strands provides an opportunity to integrate content in flexible and meaningful ways.

## Geographical Knowledge and Understanding

Geographical knowledge refers to the facts, generalisations, principles, theories and models developed in the Geography ATAR course. This knowledge is dynamic and its interpretation can be contested. Opinions and conclusions must be supported by evidence and logical argument.

Geographical understanding is the ability to see the relationships between items of knowledge and construct explanatory frameworks to illustrate these relationships. It is also the ability to apply this knowledge to new situations or to solve new problems.

## Geographical Inquiry and Skills

This strand is about the skills required to conduct a geographical inquiry and the geographical skills needed to find and communicate information and data. It contains two sub-strands: Geographical Inquiry Skills and Geographical Skills.

Geographical inquiry is a process undertaken by individual students or groups to investigate geographical questions, information, data, problems or issues to deepen their understanding. This process requires students to apply the following geographical inquiry skills:

- observing, questioning and planning
- collecting, recording, evaluating and representing
- interpreting, analysing and concluding
- communicating
- reflecting and responding.

Inquiries may vary in scale and geographic context.

When using geographical information and data and communicating, students develop the following geographical skills:

- mapping skills (use of maps and atlases)
- remote sensing skills (use of remote sensing products, such as ground level photographs, aerial photographs, radar imagery and satellite imagery)
- geographical and statistical data skills (use of geographical and statistical data in formats such as tables, graphs, maps and diagrams)
- skills in the use of information and communication technology (ICT) and geographical information systems (GIS) in a geographical context
- fieldwork skills (use of fieldwork observations and measurements).

## Relationships between the strands

The two strands are interrelated and the content enables integration of the strands in the development of a teaching and learning program. The Geographical Knowledge and Understanding strand provides the contexts through which particular inquiries and skills are to be developed. The same set of geographical skills has been included in each of the units to provide a common focus for the teaching and learning of content in the Geographical Knowledge and Understanding strand.



## Progression from the Year 7–10 curriculum

This syllabus continues to develop student understanding and skills developed from the Years 7–10 Humanities and Social Sciences (HASS) Geography curriculum. It builds on the Years 7–10 HASS skills to further develop students' ability to explore, analyse and apply the concepts of place, space, environment, interconnection, sustainability, scale and change. It does, however, feature a wider range of geographical concepts and contexts and introduces students to a more diverse, and increasingly sophisticated, range of geographical tools and skills.

## Representation of the general capabilities

The general capabilities encompass the knowledge, skills, behaviours and dispositions that will assist students to live and work successfully in the twenty-first century. Teachers should find opportunities to incorporate the capabilities into the teaching, learning and assessment program for the Geography ATAR course. The general capabilities are not assessed unless they are identified within the specified unit content.

### Literacy

In the Geography ATAR course, students use their literacy skills to explore, interpret and evaluate geographical phenomena and issues and communicate geographically. Students work with oral, print, visual and digital texts to gather, synthesise and analyse information from a range of sources, and present and justify ideas, conclusions and opinions within a broad range of geographical contexts. They understand how language is used and modified for specific purposes, and question attitudes and assumptions embedded in texts.

Geography students also develop visual literacy skills as they make meaning of information communicated through maps, graphs, cartoons and other images.

### Numeracy

In the Geography ATAR course, students use numeracy skills to identify and describe a wide range of patterns and relationships, including those that can be visually represented on a graph or map. Geography students also apply numeracy skills to interpret and manipulate data. These skills help students to recognise and describe change as it occurs over time. Students demonstrate numeracy capability by making connections between apparently diverse facts and suggesting solutions to problems in a range of circumstances; for example, the relationship between weather patterns and the likelihood of natural hazards, such as floods or landslides.

### Information and communication technology capability

In the Geography ATAR course, students use information and communication technology (ICT) to develop geographical understanding and to support the application of geographical skills. They use digital tools, including spatial technologies, to support their inquiries into geographical phenomena and issues. They also use these tools to collect and analyse data, represent it in digital form, and access and manipulate databases. In addition, students critically analyse the quality of digital information and sources of information. They also create multimodal and multifaceted reports and presentations to represent and communicate the results of geographical inquiry.

Students recognise the relative possibilities, limitations and consequences of using different forms of digital information and methods of distributing this information, and apply sophisticated understandings of social and ethical practices in the use of digital information and communications. In particular, they consider how geographical and demographic data may be used and the ethics involved.

### **Critical and creative thinking**

Critical and creative thinking processes and skills are used by students when examining diverse interactions between people, perspectives, interpretations, phenomena and environments. Through multifaceted problem posing and solving, they explore the interconnections, uncertainty and consequences of these relationships.

Thinking laterally, visualising possibilities, testing options using criteria, and making judgements are essential skills for conducting geographical investigations connected with the environment, space, sustainability, scale and change. When seeking answers to questions, students think holistically and spatially, using skills such as analysis, interpretation, extrapolation from trends, synthesis of relationships and exploration of anomalies evident in patterns.

Through developing dispositions such as intellectual openness, curiosity and showing initiative, students investigate physical and human phenomena. As independent and autonomous thinkers who seek explanations and value discovery, they turn creativity and innovation into action, apply new knowledge to identified gaps, and justify their actions.

### **Personal and social capability**

Personal and social capability involves students taking responsible personal, social and environmental action against, or in support of, decisions by organisations, governments or other bodies. Through the study of geography, students are provided with learning opportunities to assist them to develop, rehearse and refine their skills in listening to, respecting and acknowledging diverse perspectives and opinions. Students participate in collaborative investigative group work to make ethical, rational social decisions and solve problems that relate to their social and environmental contexts. Developing these personal and social capabilities positions them to advocate for opportunities and methods for change in a democratic society. Personal and social capability occurs when responsible social and environmental actions and participation are promoted, and this should be a logical outcome of many geographical investigations.

### **Ethical understanding**

Ethical understanding plays an important role in geographical inquiry. Students uncover and assess ethical considerations, such as the links between human rights and responsibilities and the ways diverse perspectives, values and cultures impact on geographical issues. Through geographical inquiry, students have the opportunity to analyse, qualify and test their own attitudes, values and beliefs and explore how people's knowledge, attitudes and values affect judgements, decisions and actions as they apply to their interaction with environments. They become aware of the need for social responsibility when confronted with alternative opinions and when seeking to resolve problems. Students apply ethical standards to guide their use of digital representations of phenomena and statistics associated with physical and environmental factors and relationships.

## **Intercultural understanding**

Students deepen their intercultural understanding as they examine geographical issues in a broad range of cultural contexts. This involves students in developing their understanding of the complexity and diversity of the world's cultures and evaluating alternative responses to the world's environments and challenges. It enables students to find interconnections and sustainable solutions in an internationally integrated world, and consider the implications of their responses from different cultural responses.

## **Representation of the cross-curriculum priorities**

The cross-curriculum priorities address contemporary issues which students face in a globalised world. Teachers should find opportunities to incorporate the priorities into the teaching and learning program for the Geography ATAR course. The cross-curriculum priorities are not assessed unless they are identified within the specified unit content.

### **Aboriginal and Torres Strait Islander histories and cultures**

In the Geography ATAR course, there is a range of opportunities to learn about Aboriginal and Torres Strait Islander histories and cultures. Students can, for example, investigate how Aboriginal and Torres Strait Islander peoples may be unequally affected by natural and ecological hazards, are represented in the challenges faced by places and the process of international cultural integration.

More broadly, students develop a range of capabilities that enable them to independently construct informed responses to the range of geographical issues involving Aboriginal and Torres Strait Islander peoples.

### **Asia and Australia's engagement with Asia**

In the Geography ATAR course, students can investigate a wide range of contexts that draw on Asia and Australia's engagement with Asia. This priority can be addressed through: the study of natural and ecological hazards and how the risks associated with such occurrences can be managed to eliminate or minimise harm to people and the environment; and other transformations taking place as a result of economic and cultural integration.

### **Sustainability**

Students explicitly address sustainability in the Geography ATAR course through an investigation of the approaches to sustainability and through an evaluation of alternative responses to geographical issues and phenomena. In doing so, they use economic, social and environmental criteria to frame investigative questions and measure the capacity of something to be maintained indefinitely into the future.

# Unit 1 – Natural and ecological hazards

## Unit description

Natural (i.e. hydrological, geomorphic and atmospheric) hazards and ecological (i.e. biological and chemical) hazards represent potential sources of harm to human life, health, income and property, and may affect elements of physical and human environments.

This unit focuses on understanding hazards, including the different types of hazards, the spatial distribution (where they occur), the causes (how they occur), the impacts and how to manage the risk of impacts from future hazard events. Risk management, in this particular context, refers to mitigation and preparedness. Mitigation is about reducing or eliminating the impact if the hazard does happen. Preparedness refers to actions carried out prior to the advance notice of a hazard to create and maintain the capacity of communities to respond to, and recover from, natural disasters. Preparedness starts at the local community level, but may extend to national and international levels through measures, such as planning, community education, information management, communications and warning systems.

This unit begins with an overview of natural and ecological hazards. Two depth studies provide for a more focused and detailed way of teaching and learning. The first study focuses on investigating a natural hazard, which includes atmospheric, hydrological and geomorphic hazards; for example, tropical storms, droughts, bushfires, earthquakes and volcanoes. The second study focuses on investigating an ecological hazard and how the risks associated with the hazard are being managed; for example, infectious diseases, animal-transmitted diseases, water-borne diseases, animal invasions and chemical hazards.

Students develop an understanding about using and applying geographical inquiry tools, such as spatial technologies, and skills to model and assess the impacts associated with natural and ecological hazards. The potential for fieldwork depends on the hazard selected, such as a visit to the town of Meckering to study earthquakes, or the impact of a specific cyclone, flood or bushfire on a town or region.

## Unit content

This unit includes the knowledge, understanding and skills described below.

### Geographical Knowledge and Understanding

#### Overview of natural and ecological hazards

- define the concepts of hazard geography, natural hazards, atmospheric hazards, hydrological hazards, geomorphic hazards and ecological hazards
- outline examples of the following natural hazards
  - tropical storms, floods, landslides, droughts, bushfires, earthquakes and volcanoes
- outline examples of the following ecological hazards
  - infectious diseases, animal-transmitted diseases, water-borne diseases, animal invasions and chemical hazards

- outline the concepts of spatial and temporal distribution, magnitude, duration, frequency, probability and scale of spatial impact in relation to natural and ecological hazards
- explain the concepts of preparedness and mitigation in relation to hazard risk management
- describe the role of spatial technologies in the study of natural and ecological hazards

Students complete **two** depth studies, which are taught with the requisite geographical inquiry skills and additional geographical skills that are described as part of this unit.

### Depth study one

Using fieldwork and/or secondary sources, students investigate **one** natural hazard type with reference to a specific event and/or place and the means by which the risks associated with the hazard are being managed. The scale of study is determined by the natural hazard selected.

For **one** natural hazard type:

- describe the characteristics of the hazard
- explain the cause/s of the hazard
- describe the spatial and temporal distribution of the hazard
- explain how physical and/or human processes determine the spatial and temporal distribution of the hazard
- compare the physical and human factors that explain why less developed countries are more vulnerable to the hazard than more developed countries.

For **one** natural hazard event and/or place:

- describe the magnitude, duration, frequency, probability and scale of spatial impact of the hazard
- explain the cause/s of the hazard
- discuss the environmental, economic and social impacts of the hazard
- explain the means by which the activities of people intensified the impacts of the hazard
- evaluate **two** hazard risk management strategies implemented to reduce the impacts of the hazard, including mitigation and preparedness.

### Depth study two

Using fieldwork and/or secondary sources, students investigate **one** ecological hazard with reference to a specific event and/or place and the means by which the risks associated with the hazard are being managed. The scale of study is determined by the ecological hazard selected.

For **one** ecological hazard:

- describe the characteristics of the hazard
- explain the cause/s of the hazard
- describe the spatial and temporal distribution of the hazard

- explain how physical and/or human processes determine the spatial and temporal distribution of the hazard
- compare the physical and human factors that explain why less developed countries are more vulnerable to the hazard than more developed countries.

For **one** ecological hazard event and/or place:

- describe the magnitude, duration, frequency, probability and scale of spatial impact of the hazard
- explain the cause/s of the hazard
- discuss the environmental, economic and social impacts of the hazard
- explain the means by which the activities of people intensified the impacts of the hazard
- evaluate **two** hazard risk management strategies implemented to reduce the impacts of the hazard, including mitigation and preparedness.

## Geographical Inquiry and Skills

All the following skills must be taught during this unit. Relevant skills will be emphasised for each depth study.

### Geographical inquiry skills

#### Observing, questioning and planning

- formulate geographical inquiry questions
- plan a geographical inquiry with clearly defined aims and appropriate methodology

#### Collecting, recording, evaluating and representing

- collect geographical information, incorporating ethical protocols, from a range of primary sources (e.g. interviews, questionnaires, student's own experiences, field observations) and secondary sources (e.g. online maps, websites, spatial software applications, print resources, and visual media)
- record observations in a range of graphic representations using spatial technologies and information and communication technologies
- evaluate the reliability, validity and usefulness of geographical sources and information
- acknowledge sources of information and use an approved referencing style

#### Interpreting, analysing and concluding

- analyse geographical information and data from a range of primary and secondary sources, and a variety of perspectives, to draw reasoned conclusions and make generalisations
- identify and analyse relationships, spatial patterns and trends, and make predictions and inferences

**Communicating**

- communicate geographical information, ideas, issues and arguments using appropriate written and/or oral, cartographic, multimodal and graphic forms
- use geographical language in appropriate contexts to demonstrate geographical knowledge and understanding

**Reflecting and responding**

- apply generalisations to evaluate alternative responses to geographical issues at a variety of scales
- propose individual and collective action, taking into account environmental, social and economic factors, and predict the outcomes of the proposed action

**Geographical skills**

The following geographical skills must be taught within each unit.

**Mapping skills** (use of maps and atlases)

- interpret a variety of topographic and thematic maps (e.g. physical, political, and social maps, synoptic charts and climate maps) at different scales, including local, national and global
- interpret and apply data from different types of statistical maps (e.g. isopleth/isoline maps, choropleth maps, proportional circle maps, overlay and dot distribution maps)
- interpret marginal information represented on maps, including title, conventional symbols contained in the legend, north point, numerical and linear scale
- establish position on a map using alphanumeric grid coordinates, eastings and northings, four figure area references, six figure grid references, and latitude and longitude expressed in degrees and minutes
- establish direction on a map using 16 point compass directions and bearings
- interpret and express scale in written, linear and ratio formats, and convert scale from one format to another
- apply the map scale to basic calculations to determine time, speed, distance and area
- interpret relief on a map using contours, height information and spot heights to describe the steepness and shape of a slope, including concave, convex and uniform, and calculate the average gradient expressed as a ratio
- identify different relief features and landforms, including hills, valleys, plains, spurs, ridges, escarpments, saddles, cliffs, types of natural vegetation cover and hydrological features, including land subject to inundation, perennial and intermittent water bodies
- interpret, construct and annotate cross sections to show natural and cultural features on the landscape
- construct simple annotated sketch maps using map conventions, including border, title, legend, north point and approximate scale

- identify and interpret natural features and cultural features on a map
- describe the site and situation of places
- identify, describe and interpret spatial patterns, including land use, settlement and transport, and spatial relationships between natural and cultural features on maps
- interpret and describe changing patterns and relationships that have taken place over time

**Remote sensing skills** (use of remote sensing products, such as ground level photographs, aerial photographs, radar imagery and satellite imagery)

- identify and describe natural and cultural features and their patterns on the Earth's surface using ground level photographs, and aerial photographs, including vertical and oblique, radar imagery and satellite imagery
- compare the different types of information available from remote sensing products with the information depicted on a topographic map
- use remote sensing products as an aid to interpreting natural and cultural features shown on topographic maps
- determine direction on remote sensing products
- apply scale to the calculation of distance on remote sensing products
- interpret the difference in scale between a photograph and a topographic map of the same place
- use combinations of remote sensing products and topographic maps to provide information based on change over time

**Geographical and statistical data skills** (use of geographical and statistical data in formats, such as tables, graphs, maps, diagrams)

- calculate and interpret descriptive statistics, including arithmetic mean, median, mode, maximum, minimum, range and frequency
- identify correlations between variables
- interpret and apply data from different types of statistical maps (e.g. isopleth/isoline maps, choropleth maps, proportional circle maps, overlay and dot distribution maps)
- interpret and construct tables and graphs (e.g. picture graphs; line, bar and compound graphs; histograms; scattergrams; climatic graphs; pie graphs; flowcharts, population pyramids)
- use systems and flow diagrams to identify relationships
- identify that statistical or spatial association does not prove a causal relationship

**Skills in the use of information and communications technology and geographical information systems** (in a geographic context)

- use the internet as a tool for geographical research



- use simple applications, software and online resources (e.g. Google Earth, Google Maps) to access atlases and remote sensing products (e.g. photographs, radar imagery, satellite imagery) for the purpose of describing and interpreting spatial patterns and relationships
- access databases (e.g. Australian Bureau of Statistics, Bureau of Meteorology) for spatial and statistical information
- use geospatial technologies to collect and map spatial data

**Fieldwork skills** (use of field observations and measurements)

- collect primary data using field techniques (e.g. surveys and interviews, observing and recording, listening, questioning, sketching and annotating, measuring and counting, photographing, note taking)
- collate primary data using techniques (e.g. listing, tabulating, graphing, constructing diagrams, mapping)
- analyse and interpret primary data

## Unit 2 – Global networks and interconnections

### Unit description

This unit focuses on the process of globalisation and is based on the reality that we live in an increasingly interconnected world. It provides students with an understanding of the economic and cultural transformations taking place in the world today and the economic, environmental and social impacts of these changes. Cultural groups that may have been isolated in the early twentieth century are now linked across an interconnected world in which there is a 'shrinking' of time and space. This is a world in which advances in transport and telecommunications technologies have not only transformed global patterns of production and consumption but also facilitated the diffusion of ideas and elements of cultures.

This unit begins with an overview of globalisation. Two depth studies provide for a more focused and detailed way of teaching and learning. The first study focuses on the changes taking place in the spatial distribution of the production and consumption of a selected commodity, good or service. The second study focuses on the impact of the diffusion, adoption and adaption on an element of culture, such as fashion, music sport religion or languages.

While the scale of the study in this unit begins with the global, locally based examples can be used to enhance students' conceptual understandings. The scale of the study for both depth studies can range from local to global, as appropriate.

Students develop an understanding about using and applying geographical inquiry methods, tools (such as spatial technologies), and skills to investigate the transformations taking place throughout the world.

### Unit content

This unit includes the knowledge, understanding and skills described below.

#### Geographical Knowledge and Understanding

##### Overview of globalisation

- define the concepts of globalisation, diffusion, adaptation and sustainability
- outline processes of globalisation in relation to:
  - changes in the spatial distribution of the production and consumption of commodities, goods and services
  - the diffusion and adaptation of elements of culture
- explain how advances in transport and telecommunications technologies have aided globalisation in relation to:
  - the expansion of world trade
  - the diffusion of elements of culture
- outline the economic and cultural importance of world cities
- describe the social, economic and environmental impacts of increased globalisation

Students complete **two** depth studies which are taught with the requisite geographical inquiry skills and additional geographical skills that are described as part of this unit.

### Depth study one

Using fieldwork and/or secondary sources, students investigate the reasons for, and impacts of, the diffusion and changing spatial distribution of production and consumption of **one** commodity, good or service from **one** of the following groups:

- a mineral ore or fossil-based energy resource – iron ore, coal, bauxite, natural gas or oil

OR

- a food or fibre-based good – wheat, timber, wine, rice, sugar, beef, seafood, cotton or wool

OR

- a complex manufactured good – consumer electronics, automobiles, engineered wood products, a clothing brand, soft drink/food production

OR

- tourism – business, eco-tourism or recreational

For the selected commodity, good or service:

- describe the commodity, good or service
- describe the process of diffusion of the commodity, good or service and its spatial distribution
- describe the changes occurring in the spatial distribution of the production and consumption of the commodity, good or service
- explain how technological advances in transport and/or telecommunications have facilitated changes in the spatial distribution of the commodity, good or service
- explain the role played by governments and/or enterprises in the distribution of the production and consumption of the commodity, good or service
- discuss the ways people and places embrace, adapt to, and/or resist the diffusion of the commodity, good or service
- evaluate the social, economic and environmental implications of the changes in the production and distribution of the commodity, good or service.

### Depth study two

Using fieldwork and/or secondary sources, students investigate the reasons for, and impacts of, the diffusion, adoption and adaptation of **one** of the following elements of culture (this list is not exhaustive):

- fashion

OR

- a sport or leisure activity

OR

- music

OR

- religion

OR

- language

OR

- architecture

OR

- political/social ideas

For the selected element of culture, where applicable:

- describe the element of culture
- describe the process of diffusion of the element of culture and its spatial distribution
- explain how technological advances in transport and/or telecommunications has facilitated changes in the diffusion of the element of culture
- explain the role played by media and emerging technologies in the generation and diffusion of the element of culture
- explain the role played by transnational institutions and/or corporations in the diffusion of the element of culture
- discuss the ways people and places embrace, adapt to, and/or resist the diffusion of the element of culture
- evaluate the social, economic and environmental implications of the changes in the spatial distribution of the element of culture.

## **Geographical Inquiry and Skills**

All the following skills must be taught during this unit. Relevant skills will be emphasised for each depth study.

### **Geographical inquiry skills**

#### **Observing, questioning and planning**

- formulate geographical inquiry questions
- plan a geographical inquiry with clearly defined aims and appropriate methodology

#### **Collecting, recording, evaluating and representing**

- collect geographical information, incorporating ethical protocols, from a range of primary sources (e.g. interviews, questionnaires, student's own experiences, field observations) and secondary sources (e.g. online maps, websites, spatial software applications, print resources, and visual media)

- record observations in a range of graphic representations using spatial technologies and information and communication technologies
- evaluate the reliability, validity and usefulness of geographical sources and information
- acknowledge sources of information and use an approved referencing style

### **Interpreting, analysing and concluding**

- analyse geographical information and data from a range of primary and secondary sources, and a variety of perspectives, to draw reasoned conclusions and make generalisations
- identify and analyse relationships, spatial patterns and trends, and make predictions and inferences

### **Communicating**

- communicate geographical information, ideas, issues and arguments using appropriate written and/or oral, cartographic, multimodal and graphic forms
- use geographical language in appropriate contexts to demonstrate geographical knowledge and understanding

### **Reflecting and responding**

- apply generalisations to evaluate alternative responses to geographical issues at a variety of scales
- propose individual and collective action, taking into account environmental, social and economic factors, and predict the outcomes of the proposed action

## **Geographical skills**

The following geographical skills must be taught within each unit.

### **Mapping skills** (use of maps and atlases)

- interpret a variety of topographic and thematic maps (e.g. physical, political, and social maps, synoptic charts and climate maps) at different scales, including local, national and global
- interpret and apply data from different types of statistical maps (e.g. isopleth/isoline maps, choropleth maps, proportional circle maps, overlay and dot distribution maps)
- interpret marginal information represented on maps, including title, conventional symbols contained in the legend, north point, numerical and linear scale
- establish position on a map using alphanumeric grid coordinates, eastings and northings, four figure area references, six figure grid references, and latitude and longitude expressed in degrees and minutes
- establish direction on a map using 16 point compass directions and bearings
- interpret and express scale in written, linear and ratio formats, and convert scale from one format to another
- apply the map scale to basic calculations to determine time, speed, distance and area

- interpret relief on a map using contours, height information and spot heights to describe the steepness and shape of a slope, including concave, convex and uniform, and calculate the average gradient expressed as a ratio
- identify different relief features and landforms, including hills, valleys, plains, spurs, ridges, escarpments, saddles, cliffs, types of natural vegetation cover and hydrological features, including land subject to inundation, perennial and intermittent water bodies
- interpret, construct and annotate cross sections to show natural and cultural features on the landscape
- construct simple annotated sketch maps using map conventions, including border, title, legend, north point and approximate scale
- identify and interpret natural features and cultural features on a map
- describe the site and situation of places
- identify, describe and interpret spatial patterns, including land use, settlement and transport, and spatial relationships between natural and cultural features on maps
- interpret and describe changing patterns and relationships that have taken place over time

**Remote sensing skills** (use of remote sensing products, such as ground level photographs, aerial photographs, radar imagery and satellite imagery)

- identify and describe natural and cultural features and their patterns on the Earth's surface using ground level photographs, and aerial photographs, including vertical and oblique, radar imagery and satellite imagery
- compare the different types of information available from remote sensing products with the information depicted on a topographic map
- use remote sensing products as an aid to interpreting natural and cultural features shown on topographic maps
- determine direction on remote sensing products
- apply scale to the calculation of distance on remote sensing products
- interpret the difference in scale between a photograph and a topographic map of the same place
- use combinations of remote sensing products and topographic maps to provide information based on change over time

**Geographical and statistical data skills** (use of geographical and statistical data in formats, such as tables, graphs, maps, diagrams)

- calculate and interpret descriptive statistics, including arithmetic mean, median, mode, maximum, minimum, range and frequency
- identify correlations between variables
- interpret and apply data from different types of statistical maps (e.g. isopleth/isoline maps, choropleth maps, proportional circle maps, overlay and dot distribution maps)

- interpret and construct tables and graphs (e.g. picture graphs; line, bar and compound graphs; histograms; scattergrams; climatic graphs; pie graphs; flowcharts, population pyramids)
- use systems and flow diagrams to identify relationships
- identify that statistical or spatial association does not prove a causal relationship

**Skills in the use of information and communications technology and geographical information systems** (in a geographic context)

- use the internet as a tool for geographical research
- use simple applications, software and online resources (e.g. Google Earth, Google Maps) to access atlases and remote sensing products (e.g. photographs, radar imagery, satellite imagery) for the purpose of describing and interpreting spatial patterns and relationships
- access databases (e.g. Australian Bureau of Statistics, Bureau of Meteorology) for spatial and statistical information
- use geospatial technologies to collect and map spatial data

**Fieldwork skills** (use of field observations and measurements)

- collect primary data using field techniques (e.g. surveys and interviews, observing and recording, listening, questioning, sketching and annotating, measuring and counting, photographing, note taking)
- collate primary data using techniques (e.g. listing, tabulating, graphing, constructing diagrams, mapping)
- analyse and interpret primary data

## Assessment

Assessment is an integral part of teaching and learning that at the senior secondary years:

- provides evidence of student achievement
- identifies opportunities for further learning
- connects to the standards described for the course
- contributes to the recognition of student achievement.

Assessment for learning (formative) and assessment of learning (summative) enable teachers to gather evidence to support students and make judgements about student achievement. These are not necessarily discrete approaches and may be used individually or together, and formally or informally.

Formative assessment involves a range of informal and formal assessment procedures used by teachers during the learning process in order to improve student achievement and to guide teaching and learning activities. It often involves qualitative feedback (rather than scores) for both students and teachers, which focuses on the details of specific knowledge and skills that are being learnt.

Summative assessment involves assessment procedures that aim to determine students' learning at a particular time, for example when reporting against the standards, after completion of a unit/s. These assessments should be limited in number and made clear to students through the assessment outline.

Appropriate assessment of student work in this course is underpinned by reference to the set of pre-determined course standards. These standards describe the level of achievement required to achieve each grade, from A to E. Teachers use these standards to determine how well a student has demonstrated their learning.

Where relevant, higher order cognitive skills (e.g. application, analysis, evaluation and synthesis) and the general capabilities should be included in the assessment of student achievement in this course. All assessment should be consistent with the requirements identified in the course assessment table.

Assessment should not generate workload and/or stress that, under fair and reasonable circumstances, would unduly diminish the performance of students.

### School-based assessment

The *Western Australian Certificate of Education (WACE) Manual* contains essential information on principles, policies and procedures for school-based assessment that must be read in conjunction with this syllabus.

School-based assessment involves teachers gathering, describing and quantifying information about student achievement.

Teachers design school-based assessment tasks to meet the needs of students. As outlined in the *WACE Manual*, school-based assessment of student achievement in this course must be based on the Principles of Assessment:

- Assessment is an integral part of teaching and learning



- Assessment should be educative
- Assessment should be fair
- Assessment should be designed to meet its specific purpose/s
- Assessment should lead to informative reporting
- Assessment should lead to school-wide evaluation processes
- Assessment should provide significant data for improvement of teaching practices.

The table below provides details of the assessment types and their weighting for the Geography ATAR Year 11 syllabus.

Summative assessments in this course must:

- be limited in number to no more than eight tasks
- allow for the assessment of each assessment type at least once for each unit in the unit pair
- have a minimum value of 5 per cent of the total school assessment mark
- provide a representative sampling of the syllabus content.

Assessment tasks not administered under test or controlled conditions require appropriate authentication processes.

### Assessment table – Year 11

Type of assessment	Weighting
<b>Geographical inquiry/Fieldwork</b> Students conduct investigations and fieldwork, process and translate information, and communicate findings following ethical protocols and procedures. Students actively engage in collecting and using primary and secondary information sources. Formats can include: assignment, research/fieldwork booklet, report, in-class validation and/or a combination of these.	30%
<b>Response/Practical skills</b> Questions can require students to respond to stimulus material and/or include the application of practical skills. Formats can include: map interpretation, data analysis, multiple-choice questions, short responses, sectionalised extended responses, extended responses, and/or a combination of these. Typically these tasks are administered under test conditions.	40%
<b>Examination</b> Typically conducted at the end of each semester and/or unit. In preparation for Unit 3 and Unit 4, the examination should reflect the examination design brief included in the ATAR Year 12 syllabus for this course.	30%

Teachers must use the assessment table to develop an assessment outline for the pair of units (or for a single unit where only one is being studied).

The assessment outline must:

- include a set of assessment tasks
- include a general description of each task
- indicate the unit content to be assessed
- indicate a weighting for each task and each assessment type
- include the approximate timing of each task (for example, the week the task is conducted, or the issue and submission dates for an extended task).

## Reporting

Schools report student achievement, underpinned by a set of pre-determined standards, using the following grades:

Grade	Interpretation
A	Excellent achievement
B	High achievement
C	Satisfactory achievement
D	Limited achievement
E	Very low achievement

The grade descriptions for the Geography ATAR Year 11 syllabus are provided in Appendix 1. They are used to support the allocation of a grade. They can also be accessed, together with annotated work samples, on the course page of the [Authority website \(www.scsa.wa.edu.au\)](http://www.scsa.wa.edu.au).

To be assigned a grade, a student must have had the opportunity to complete the education program, including the assessment program (unless the school accepts that there are exceptional and justifiable circumstances).

Refer to the *WACE Manual* for further information about the use of a ranked list in the process of assigning grades.

The grade is determined by reference to the standard, not allocated on the basis of a pre-determined range of marks (cut-offs).

## Appendix 1 – Grade descriptions Year 11

**A**

### **Geographical knowledge and understanding**

Presents comprehensive and accurate discussions providing detailed information about features, activities, spatial patterns and associations, processes, relationships and/or factors. Makes detailed and relevant references to geographical concepts and/or theories.

### **Geographical terminology and concepts**

Uses geographical terminology accurately and applies related geographical concepts to develop cohesive and relevant responses.

### **Geographical skills**

Applies appropriate geographical thinking, skills and processes, and clearly shows links between them.

Accurately analyses and applies mapping and/or diagrammatic skills and processes in a wide variety of contexts to enhance responses.

Presents detailed effective responses, including extended responses with well-developed sentences and paragraphs.

### **Use of supporting evidence**

Selects and correctly applies a wide range of appropriate supporting evidence, including examples, quotations, sources, statistics, data, maps and/or sketches, when developing responses.

**B**

### **Geographical knowledge and understanding**

Presents detailed discussions providing information about features, activities, spatial patterns and associations, processes, relationships and/or factors.

Makes relevant references to geographical concepts and/or theories.

### **Geographical terminology and concepts**

Uses geographical terminology accurately and applies related geographical concepts to develop relevant responses.

### **Geographical skills**

Applies appropriate geographical thinking, skills and processes, and shows the links between them.

Applies mapping and/or diagrammatic skills and processes in a range of contexts to develop responses.

Presents responses, including extended responses containing well-developed sentences and paragraphs.

### **Use of supporting evidence**

Selects and applies a range of appropriate supporting evidence, including examples, quotations, sources, statistics, data, maps and/or sketches, when developing responses.

C	<p><b>Geographical knowledge and understanding</b> Presents generalised brief discussions providing information about features, activities, spatial patterns and associations, processes, relationships and/or factors. Makes general references to geographical concepts and/or theories.</p> <p><b>Geographical terminology and concepts</b> Uses geographical terminology and concepts to develop responses.</p> <p><b>Geographical skills</b> Applies geographical thinking, skills and processes that are mainly appropriate. Applies mapping and/or diagrammatic skills and processes to support responses. Presents responses, including extended answers with mostly appropriate sentences and paragraphs.</p> <p><b>Use of supporting evidence</b> Selects and applies some supporting evidence, including examples, quotations, sources, statistics, maps and/or sketches, when developing responses.</p>
D	<p><b>Geographical knowledge and understanding</b> Presents basic discussions with limited detail. Makes limited references to geographical concepts and/or theories.</p> <p><b>Geographical terminology and concepts</b> Makes limited use of geographical terminology and concepts.</p> <p><b>Geographical skills</b> Applies limited geographical thinking, skills and processes. Makes limited use of mapping skills and/or processes. Presents responses showing poor literacy skills, making them difficult to understand.</p> <p><b>Use of supporting evidence</b> Makes limited use of evidence to support statements and generalisations.</p>
E	<p>Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade.</p>

\* These grade descriptions will be reviewed at the end of the second year of implementation of this syllabus.

## Appendix 2 – Glossary

This glossary is provided to enable a common understanding of the key geographical terms in this syllabus.

### **Adaptation**

Alteration or adjustment in response to a changed environment.

### **Atmospheric hazard**

Atmospheric hazards are hazards that are created from atmospheric and/or weather processes. Examples of atmospheric hazards can include storms, heat waves, cold waves, cyclones, droughts, hurricanes, tornadoes, wildfires

### **Change**

The concept of change involves both time and space. Geographical phenomena are constantly changing, and can often be best understood by investigating how they have developed over time periods ranging from a few years to thousands.

### **Diffusion**

The transfer or dispersal of cultural elements from one group of people to other groups of people.

### **Distribution**

The spatial distribution of geographical phenomena throughout the world, for example, earthquake hazards and fashion design, such as the way in which people or things are spread out in a place. See also Spatial Distribution.

### **Duration**

Duration refers to the length of time that a hazard event lasts, e.g. most of the Ebola outbreaks in West Africa have had a long duration, lasting for a year or more. The Kobe earthquake of 1995 took place 5.46 am, Tuesday, 17 January 1995, and the shaking lasted for 20 seconds.

### **Ecological hazard**

A biological or chemical hazard that has the potential to impact adversely on the wellbeing of people or on the environment more generally. Ecological hazards involve both biological and chemical agents. Biological factors lead to infectious diseases. While many of these diseases have proven difficult to eradicate, enough is known about them to mount interventions that drastically reduce their incidence. Chemical hazards can cause immediate, dangerous health effects and can also contribute to chronic, or long term, problems.

### **Economic integration**

An outcome of the reduction or elimination of the barriers to the flow of goods, services and factors of production between nations. The stated aims of economic integration are a reduction in the costs incurred by both consumers and producers, as well as to increase trade between countries.

**Environment**

Where unqualified, environment means the living and non-living elements of the Earth's surface and atmosphere. It includes human changes to the Earth's surface; for example, croplands, planted forests, buildings and roads.

**Fieldwork**

Fieldwork is an integral part of geographical learning. It provides a planned opportunity to engage with the environment – to observe and investigate in the 'real world' the geographical phenomena, issues and processes studied in the classroom. There are multiple approaches to fieldwork ranging from the observational to the fully participatory. Fieldwork can be undertaken in a range of settings, including the school grounds. It includes 'virtual fieldwork' – the use of the internet to virtually visit a site and engage in a guided geographical inquiry. A virtual field trip provides the opportunity to investigate geographical phenomena not normally accessible due to distance or cost.

**Frequency**

Frequency refers to how often a hazard event occurs in a particular area/country; for example, in West Africa, Ebola outbreaks have occurred approximately every five years since the 1994 outbreak.

**Geographical inquiry methodologies**

An approach to the study focused on the development of a wide variety of skills, such as observing, reading, gathering, organising, preparing, presenting, analysing, interpreting and synthesising geographic information from a variety of sources, including spatial technologies and fieldwork. It involves the skills needed to formulate questions and initiate, plan and implement an inquiry relevant to a geographical issue, process or phenomenon.

**Geographical processes**

The combination of physical and human forces that form and transform our world.

**Geomorphic hazard**

Geomorphic hazards are hazards that are created by the movement of the Earth's surface or crust, i.e. plate tectonic movements. Examples include earthquakes, volcanic eruptions and movement induced landslides.

**Global distribution**

The spatial distribution of geographical phenomena throughout the world; for example, megacities, earthquake hazards, deforestation and fashion design.

**Globalisation**

The increased interconnectedness and interdependence of people and countries resulting from the expanding integration of trade, finance, people, and ideas in one global marketplace. Advancements in technology, communication, science, transport and industry have accelerated the pace of this integration over the past few decades.

**Hazards**

Phenomena that occur when the forces of nature combine to become destructive and have potential to damage the environment and endanger communities.

**Hazard geography**

Is the study of natural and ecological hazards, where and how they occur and how to minimise their impact.

**Human processes**

The actions of humans that can affect the impact of a hazard, e.g. clearing land, removing barrier systems, building in low lying areas, building earthquake resistant buildings.

**Hydrological hazards**

Hydrological hazards are those that involve the movement and distribution of water. Examples of hydrological hazards include flooding, water induced landslides, king tides, coastal erosion

**Interconnection**

The concept of interconnection emphasises that no object of geographical study can be viewed in isolation. It is about the ways in which 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.

**Magnitude**

The strength of a hazard, or how large and important a natural hazard event is. Most hazards are measured on a scale, e.g. the Richter scale or the volcanic explosivity index (VEI). Generally speaking, the higher the magnitude, the more severe the hazard is. For an ecological hazard, the magnitude can be measured by the number of deaths and/or number of people infected.

**Mitigation**

Mitigation involves the implementation of the strategies to eliminate or minimise the severity of a hazard or similarly adverse occurrence.

**Natural hazard**

Atmospheric, hydrological and geomorphic processes and events in our environment that have the potential to affect people adversely.

**Natural system**

A set of naturally occurring interrelated parts with distinct inputs, throughputs and outputs.

**Perspective**

A way of viewing the world, the people in it, their relationships to each other and their relationships to communities and environments.

**Physical processes**

The atmospheric, biological, chemical and physical processes that take place in the lithosphere, hydrosphere, atmosphere and biosphere. They can be further broken down; for example, soil forming processes, mass wasting, cloud forming processes, fluvial processes, marine processes, glacial processes and biogeochemical cycling.

**Place**

Places play a fundamental role in human life. The world is made up of places, from those with largely natural features, for example, an area of rainforest, to those with largely constructed features, such as the centre of a large city. They are where we live and grow up. Our most common relationships are likely to be with people in the same place. The environmental and human qualities of places influence our lives and life opportunities.

Places are, therefore, cultural constructs. They are sites of biodiversity, locations for economic activity, centres of decision making and administration, sites for the transmission and exchange of knowledge and ideas, meeting places for social interaction, sources of identity, belonging and enjoyment, and areas of natural beauty and wonder. They are where major events occur, from natural disasters and financial crises to sporting events.

Places can also be laboratories for the comparative study of the relationships between processes and phenomena, because the uniqueness of each place means that similar processes and influences can produce different outcomes in different places. The importance of Country/Place to Aboriginal and Torres Strait Islander peoples is an example of the interaction between culture and identity, and shows how places can be invested with spiritual and other significance.

**Preparedness**

As it relates to hazards, preparedness involves planning the interventions required to prevent the effects of the hazard. This includes being able to respond to and cope effectively with the impacts.

**Probability**

A prediction that a hazard event will occur based on scientific observations or relevant factors to the hazard; for example, information from recent earthquakes and mapping of active faults has found that there is a 72% probability of a magnitude 6.7 or greater earthquake occurring in the San Francisco Bay region before 2043.

**Remote sensing**

The science of obtaining information about objects or areas from a distance, typically from aircraft or satellites.

**Resilience**

The ability to recover or adjust in response to a changed situation.

**Risk management**

The identification of the probability of a hazard and the vulnerability of the population that may be affected. It requires understanding the relevant physical and human processes. Risk management includes the actions involved to reduce or eliminate the severity of impacts on a population.



## Scale

The concept of scale is used to analyse phenomena and look for explanations at different spatial levels, from the personal to the local, regional, national and global. 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 geographers look for explanations or outcomes at different levels. Local events can have global outcomes; for example, the effects of local actions such as permanent vegetation removal 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.

## Space

The concept of space includes location, spatial distribution and the organisation of space. Location plays an important role in determining the environmental characteristics of a place, the viability of an economic activity or the opportunities open to an individual, but the effects of location on human activities also depend on the infrastructure and the technologies that link places, and the ways in which these are managed by businesses and governments.

Spatial distribution, the second element in the concept of space, underlies much geographical study. The geographical characteristics of places have distributions across space that form patterns, and the analysis of these patterns contributes to an understanding of the causes of these characteristics and of the forms they take in particular places. Spatial distributions also have significant environmental, economic, social and political consequences.

The organisation of space concerns how it is perceived, structured, organised and managed by people within specific cultural contexts, and how this creates particular types of spaces.

## Spatial association

The relationship between the distribution patterns of different phenomena on the Earth's surface.

## Spatial distribution

The arrangement of geographical phenomena or activities across the Earth's surface.

## Spatial impact

The extent of an area at which a phenomenon or a process occurs. For example, the spatial scale of the 2007–2008 outbreak of Ebola was local as the outbreak only occurred in one area/country, the Democratic Republic of Congo.

## Spatial interaction

The effects of movement or flows of air, water, material, life forms, people, goods or information between different locations on the Earth's surface.

### **Spatial technologies**

Any software or hardware that interacts with real world locations. The use of spatial technologies forms the basis of many geographers' work practice. Global positioning systems (GPS), Google Earth, geographic information systems (GIS) and the use of satellite images are the most commonly used spatial technologies to visualise, manipulate, analyse, display and record spatial data.

The use of spatial technologies is integral to the inquiry and skills process. The spatial technology application links geographic locations to information about them in order to:

- find information about places across the globe or locally
- analyse relationships between locations
- make decisions on the location of facilities
- map the demographics of target markets
- integrate maps with information from a variety of sources.

### **Sustainability**

Meeting the needs of current and future generations through simultaneous environmental, social and economic adaptation and improvement.

### **Temporal distribution**

The distribution of geographical phenomena over time.

### **Thinking geographically**

To think geographically involves the application of the discipline's organising concepts to investigation of geographical issues and phenomena. It is conceptual knowledge – the ideas we use to enhance our knowledge and understanding of the world. The organising concepts in senior secondary geography are place, space, environment, interconnection, sustainability, scale and change.

### **Variety of scales**

The geographical view of processes and phenomena at different levels on a continuum from the local to the international and global scales. It may include: comparative studies at the same scale; studying the same issue and phenomenon at a range of scales; or seeking explanations at a different scale to the one being studied.

### **Vulnerability**

The susceptibility to harm or change.

### **World city**

World cities (sometimes referred to as global cities) are centres of global economic and cultural authority. They are the places where the world's most important financial and corporate institutions are based and where decisions that 'drive' the global economy are made. They also play a globally significant role in the production and dissemination of knowledge (i.e. news, entertainment) and art. They are the centres of research and innovation.

## Appendix 3 – Glossary of key words in the formulation of questions

This glossary is provided to enable a common understanding of the verbs to be used when constructing questions for assessment.

Term	Definition
Account	Account for: state reasons for, report on. Give an account of: narrate a series of events or transactions
Advise	Recommend or inform
Analyse	Identify components and the relationship between them; draw out and relate implications
Apply	Use, utilise, employ in a particular situation
Argue	Make a case, based on appropriate evidence, for and/or against some given point of view
Assess	Make a judgement of value, quality, outcomes, results or size
Calculate	Ascertain/determine from given facts, figures or information
Choose (multiple-choice)	Decide or select the most suitable from a number of different options
Clarify	Make clear or plain
Classify	Arrange or include in classes/categories
Comment on	Make reference to and expand upon
Compare	Show how things are similar and different
Complete	Finish an outlined task
Consider	Reflect on and make a judgement/evaluation
Construct	Make; build; put together items or arguments
Contrast	Show how things are different or opposite
Correlate	Demonstrate a mutual or complementary relationship
Create	Make, invent something
Critically (analyse/evaluate)	Add a degree or level of accuracy depth, knowledge and understanding, logic, questioning, reflection and quality to analyse/evaluate
Debate	Develop a logical (sometimes persuasive) argument, giving differing views in response to a topic
Deduce	Draw conclusions
Define	State meaning and identify essential qualities
Demonstrate	Show by example

Term	Definition
Describe	Provide characteristics and features
Determine	Decide, find out
Discuss	Identify issues and provide points for and/or against
Distinguish	Recognise or note/indicate as being distinct or different from; note differences between
Draw (diagrams etc.)	An instruction, as in <i>draw a circle</i>
Evaluate	To ascertain the value or amount of; appraise carefully
Examine	Inquire into
Explain	Relate cause and effect; make the relationships between things evident; provide why and/or how
Explore	Investigate, search for or evaluate
Extract	Choose relevant and/or appropriate details
Extrapolate	Infer from what is known
Identify	Recognise and name
Illustrate	Similar to 'explain' (see above), but requires the quoting of specific examples or statistics or possibly the drawing of maps, graphs, sketches etc.
Interpret	Draw meaning from
Investigate	To plan, search or inquire into; examine in order to obtain the true facts
Justify	Support an argument or conclusion; give reasons for your statements or comments
Label (and annotate)	Identify by placing a name or word used to describe the object or thing
List	Provide a series of related words, names, numbers or items that are arranged in order, one after the other
Name	Provide a word or term used to identify an object, person, thing, place etc. (something that is known and distinguished from other people or things)
Outline	Sketch in general terms; indicate the main features of
Predict	Suggest what may happen based on available information
Prepare (e.g. in Accounting)	Take the necessary action to put something into a state where it is fit for use or action, or for a particular event or purpose
Present (an argument)	Offer or convey something such as an argument or statement to somebody formally; a discussion that offers different points of view on an issue or topic; debate
Propose	Put forward (for example, a point of view, idea, argument, suggestion) for consideration or action
Recall	Present remembered ideas, facts or experiences

Term	Definition
Recommend	Provide reasons in favour
Recount	Retell a series of events
Respond to ...	Provide an answer; reply
Select	Choose somebody or something from among several
Show	Give information; illustrate
Sketch	A picture or diagram that is done quickly, roughly; a brief outline
State	Express the main points of an idea or topic, perhaps in the manner of 'describe' (see above)
Summarise	Express, concisely, the relevant details
Synthesise	Put together various elements to make a whole; gather all ideas and combine them into a complex whole; combine all parts