



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

GEOGRAPHY

GENERAL COURSE

Year 12 syllabus

IMPORTANT INFORMATION

This syllabus is effective from 1 January 2017.

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Content

Rationale	1
Course outcomes	3
Organisation	4
Structure of the syllabus	4
Organisation of content	4
Representation of the general capabilities	6
Representation of the cross-curriculum priorities	8
Unit 3 – Natural and ecological hazards	9
Unit description	9
Learning outcomes	9
Unit content	10
Unit 4 – Global networks and interconnections	15
Unit description	15
Learning outcomes	15
Unit content	16
School-based assessment	21
Externally set task	22
Grading	22
Appendix 1 – Grade descriptions Year 12	23
Appendix 2 – Glossary	25

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.

In the senior secondary years, the Geography General 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 rapid change in biophysical environments, the sustainability of places, dealing with environmental risks and the consequences of international integration.

Geography addresses questions about the interaction of natural and human environments within various natural and social systems. It examines the factors that impact upon decisions about sustainability, the conflicting values between individuals and groups over sustainability and the degree of commitment towards sustainable development.

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. Taken together, the ability of students to apply conceptual knowledge, in the context of an inquiry, and the application of skills, constitute 'thinking geographically' – a uniquely powerful way of viewing the world.

The course builds students' knowledge and understanding of the uniqueness of places and an appreciation that place matters in explanations of economic, social and environmental phenomena and processes. It also develops students' knowledge about the interconnections between places. Nothing exists in isolation. Consequently, the subject considers the significance of location, distance and proximity.

Through the study of geography, students develop the ability to investigate the arrangement of biophysical and human phenomena across space in order to understand the interconnections between people, places and environments. As a subject of the Humanities and Social Sciences, geography studies spatial aspects of human culture using inquiry methods that are analytical, critical and speculative. In doing so, it values imagination and creativity. As a Science, Geography develops an appreciation of the role of the biophysical 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 phenomenon from a range of perspectives including those of Aboriginal and Torres Strait Islander Peoples.

In the Geography General course, students investigate geographical issues and phenomena in a variety of scales and contexts. This may include: comparative studies at the same scale; studying the same issue or phenomenon at a range of scales; or seeking explanations at a different scale to the one being studied. The ability to perform multi-scale and hierarchical analysis is developed further in this syllabus.

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 help 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 urban planning, climate change, environments at risk, sustainable development practices and the unequal distribution of resources throughout the world.

The Geography General 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 multi-modal forms. In addition, students communicate their conclusions by written and oral means.

Course outcomes

The Geography General course is designed to facilitate achievement of the following outcomes.

Outcome 1 – Geographical concepts

Students understand and apply key geographical concepts – including place, space, environment, interconnection, sustainability, scale and change.

In achieving this outcome, students:

- understand that geographical features are shaped by natural and social systems over time
- understand that geographical features are influenced by natural processes and human activities
- understand that natural and social systems form patterns of features on the Earth's surface that change over time
- understand that the degree to which people adopt sustainable practices and solutions influences the nature of their impact on their environments.

Outcome 2 – Geographical inquiry skills

Students investigate the interactions that occur within natural and cultural environments in order to make informed decisions and communicate findings.

In achieving this outcome, students:

- plan ways to gather and organise geographical information
- collect and record information by using geographical inquiry methods
- interpret and analyse information gained from geographical investigations to form conclusions
- apply and communicate findings of geographical investigations to suit a purpose or an audience
- reflect on, and respond to, conclusions.

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 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3 – Natural and ecological hazards

In this unit, students explore the management of hazards and the risks they pose to people and environments. Risk management is defined in terms of preparedness, mitigation and/or prevention.

Unit 4 – Global networks and interconnections

In this unit, students explore the economic and cultural transformations taking place in the world, the spatial outcomes of these processes, and their social and geopolitical consequences 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.

The content in each unit is divided into an overview and one or more 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.

Organisation of content

The course is divided into two interrelated strands: Geographical Knowledge and Understanding, and Geographical Inquiry and Skills.

Geographical Knowledge and Understanding

Geographical knowledge refers to the facts, generalisations, principles, theories and models developed in Geography. This knowledge is dynamic and its interpretation can vary. 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 and information and communication technology geographical information systems in a geographical context
- fieldwork skills (use of fieldwork observations and measurements).

Relationships between the strands

The two strands are interrelated and the content has been written in a way that 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 four units to provide a common focus for the teaching and learning of content in the Geographical Knowledge and Understanding strand.

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 may find opportunities to incorporate the capabilities into the teaching and learning program for the Geography General course. The general capabilities are not assessed unless they are identified within the specified unit content.

Literacy

In the Geography General course, students use 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 General 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 realise 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 drought or landslides.

Information and communication technology capability

In the Geography General course, students use information and communication technology (ICT) to develop geographical understanding, and 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, access and manipulate databases, and model conceptual constructs. In addition, students critically analyse the quality of digital information and sources of information. They also create multimodal and multi-faceted 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 multi-faceted 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 biophysical 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 the Geography General course, 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 environment. They become aware of the need for social responsibility when confronted with alternate opinions and when seeking to resolve problems. Students apply ethical standards to guide their use of digital representations of phenomena and statistics associated with biophysical 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 the contemporary issues which students face in a globalised world. Teachers may find opportunities to incorporate the priorities into the teaching and learning program for the Geography General 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 General course, there are 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 or by the use of natural resources.

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 General course, students 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. It can also be achieved through a study of the development of sustainable resource use, particularly in Asia and Australia.

Sustainability

Students explicitly address sustainability in Geography 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 3 – Natural and ecological hazards

Unit description

Natural and ecological hazards represent potential sources of harm to human life, health, income and property, and may affect elements of the biophysical, managed and constructed elements of environments.

This unit focuses on understanding how these hazards and their associated risks are perceived and managed at local, regional and global levels. Risk management, in this particular context, refers to prevention, mitigation and preparedness. Prevention is concerned with the long term aspects of hazards and focuses on avoiding the risks associated with their reoccurrence. 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 branch out to national and international levels through measures, such as planning, community education, information management, communications and warning systems.

Building on their existing geographical knowledge and understandings, students explore natural hazards, including atmospheric, hydrological and geomorphic hazards; for example, storms, cyclones, tornadoes, frosts, droughts, bushfires, flooding, earthquakes, volcanoes and landslides. They will also explore ecological hazards; for example, environmental diseases/pandemics (toxin-based respiratory ailments, infectious diseases, animal-transmitted diseases and water-borne diseases) and plant and animal invasions.

Students develop an understanding about using and applying geographical inquiry tools, such as spatial technologies, and skills, to model, assess and forecast risk, and to investigate the risks 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.

Learning outcomes

By the end of this unit, students:

- understand the nature and causes of natural and ecological hazards
- understand the nature of the risks to be managed, such as loss of property/life, effects on infrastructure, jobs, economy, and physical and mental health
- understand that places and environments are influenced by both natural and ecological hazards
- understand the complexity of human-environment interdependence in relation to natural and ecological hazards
- demonstrate a knowledge of the concept of risk management
- understand and apply key geographical concepts, including place, space, environment, interconnection, sustainability, scale and change, as part of a geographical inquiry
- apply geographical inquiry skills and a range of other geographical skills, including spatial technologies and fieldwork, to investigate natural and ecological hazards.

Unit content

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

Geographical Knowledge and Understanding

Overview of natural and ecological hazards

- an overview of the nature of natural and ecological hazards with particular reference to:
 - the concept of hazard geography
 - identification and classification of natural hazards (atmospheric, hydrological and geomorphic)
 - examples of natural hazards, including storms, cyclones, hurricanes, typhoons, tornadoes, frosts, droughts, bushfires, flooding, earthquakes, volcanoes, landslides
 - ecological hazards, including environmental diseases/pandemics (toxin-based respiratory ailments, infectious diseases, animal-transmitted diseases and water-borne diseases), and plant and animal invasions
- the concepts of risk and hazard management as applied to natural and ecological hazards
- the spatial and temporal distribution, magnitude, duration, frequency, probability and scale of spatial impact of natural and ecological hazards at a global scale
- 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 described as part of this unit.

Depth study one

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

Students study the hazard in order to investigate:

- the nature and causes of the hazard
- the nature of the risks to be managed such as:
 - loss of property/life
 - effects on infrastructure, jobs and the economy
 - the impact on physical and mental health
- the space and time distribution of the hazard and how an understanding of biophysical and human processes can be used to explain the patterns that are identified
- the magnitude, duration, frequency, probability and scale of spatial impact of the hazard
- the physical and human factors that explain why some places and people are more vulnerable to the hazard than others

- the means by which the activities of people can intensify the impacts of the hazard, such as:
 - land clearance and its impact on the intensity and frequency of flooding
 - removal of coastal dune barrier systems
 - building of settlements on low lying coastlines threatened by tsunamis
 - using construction techniques unable to withstand seismic activity
- the environmental, economic and social impacts of the hazard in a developed country, such as Australia compared with at least one less developed country or region.

Depth study two

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

Students study the hazard in order to investigate:

- the nature and causes of the hazard
- the nature of the risks to be managed such as:
 - loss of property/life
 - effects on infrastructure, jobs and the economy
 - the impact on physical and mental health
- the space and time distribution of the hazard, and how an understanding of biophysical and human processes can be used to explain the patterns that are identified
- the magnitude, duration, frequency, probability and scale of spatial impact of the hazard
- the physical and human factors that explain why some places and people are more vulnerable to the hazard than others
- the means by which the activities of people can intensify the impacts of the hazard such as:
 - deliberate or accidental introduction of foreign plant or animal species to natural ecosystems
 - global transport systems, human settlement and agriculture facilitating the spread of infectious diseases
- the environmental, economic and social impacts of the hazard in a developed country, such as Australia compared with at least one less developed country or region.

Geographical Inquiry and Skills

All the following skills should be taught during the 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 (interviews, questionnaires, student's own experiences, and field observations) and secondary sources (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 technique

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

- identify and interpret a variety of topographic maps, thematic maps (physical, political, and social maps, overlay maps, synoptic charts and climate maps) and statistical maps (proportional circle and dot distribution maps) at different scales (local, national and global)
- understand and interpret marginal information represented on maps (title, conventional signs contained in the legend, north point, numerical and linear scales)
- 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 general compass directions (8 points) and bearings
- interpret and express scale in written, linear and ratio (representative fraction) formats, and convert scale from one format to another
- apply the map scale to basic calculations to determine distance and area
- interpret relief on a map using contours and spot heights to describe the steepness and shape of a slope (concave, convex and uniform)

- identify different relief features (landforms, including hills, valleys, plains, spurs, ridges, escarpments, saddles, cliffs) and different types of natural vegetation cover and hydrological features
- construct simple annotated sketch maps using map conventions (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 and describe spatial patterns, including land use, settlement and transport
- identify and describe spatial relationships between natural and cultural features

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, aerial photographs (vertical and oblique), radar imagery and satellite imagery (Landsat, weather satellites and Google Earth)
- 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

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

- calculate and interpret descriptive statistics, including central tendency (arithmetic mean, median, mode) and variation (maximum, minimum and range)
- interpret and apply data from different types of statistical maps (isopleth/isoline, choropleth, proportional circle and dot distribution maps)
- interpret and construct tables and graphs, including: picture graphs; line and bar graphs; scattergrams; climatic graphs; pie graphs; flowcharts and population pyramids
- use simple systems and flow diagrams to organise thinking about relationships
- extrapolate trends over time to forecast future conditions

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 (including Google Earth and Google Maps) to access atlases and remote sensing products (photographs, radar imagery and satellite imagery) for the purpose of identifying and describing spatial patterns and relationships

- access common databases, such as the Bureau of Meteorology, for spatial and statistical information
- use geospatial technologies, including global positioning systems (GPS), to collect and map spatial data
- use simple geographical information systems (GIS) products in description and analysis relevant to the unit content

Fieldwork skills (use of field observations and measurements)

- collect primary data using field techniques, including: surveys and interviews, observing and recording, listening, questioning, sketching and annotating, measuring and counting, photographing and note-taking
- collate field data using techniques, including: listing, tabulating, report writing, graphing, constructing diagrams and mapping
- analyse and interpret primary data

Unit 4 – Global networks and interconnections

Unit description

This unit focuses on the process of international integration (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, the spatial outcomes of these processes, and their political and social consequences. 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 cultures. The unit explains how these advances in transport and communication technology have lessened the friction of distance and have impacted at a range of local, national and global scales. 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. Of particular interest are the ways in which people adapt and respond to these changes.

Students have the opportunity to explore the ideas developed in the unit through an investigation of the changes taking place in the spatial distribution of the production and consumption of a selected commodity, good or service and the study of an example of cultural diffusion, adoption and adaptation. They also investigate the ways people embrace, adapt to, or resist the forces of international integration.

While the scale of the study in this unit begins with the global, locally based examples can be used to enhance students' conceptual understanding. The scale of the study for both depth studies, unless specified, 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.

Learning outcomes

By the end of this unit, students:

- understand the nature and causes of international integration and its spatial, economic, political and social consequences
- understand the ways people embrace, adapt to and resist the forces of international integration
- understand and apply key geographical concepts, including place, space, environment, interconnection, sustainability, scale and change, as part of a geographical inquiry
- think geographically, based on an understanding of the complexities of an increasingly interdependent world
- apply geographical inquiry skills and a range of other geographical skills, including spatial technologies and fieldwork, to investigate the complexity of the integrated world.

Unit content

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

Geographical Knowledge and Understanding

Overview of international integration

- the application of the concept of sustainability when considering the outcomes of increased globalisation
- the process of international integration, especially as it relates to the transformations taking place in the location of production and consumption of commodities, goods and services
- the spread and adaptation of ideas, meanings and values that continuously transform and renew cultures
- advances in transport and telecommunications technologies as a facilitator of international integration, including their role in the expansion of world trade, the emergence of global financial markets, and the dissemination of ideas and elements of culture
- the economic and cultural importance of world cities in the integrated global economy and their emergence as centres of cultural innovation, transmission and integration of new ideas about the plurality of life throughout the world
- the concept of global shift and the re-emergence of Asia, particularly China and India, as global economic and cultural powers and the relative economic decline but sustained cultural authority of the United States of America and Europe

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

Depth study one

Using fieldwork and/or secondary sources students investigate the reasons for and consequences of the changing spatial distribution of production and consumption (and, where appropriate, reuse) of **at least one** example of a 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 commodity – wheat, timber, wine, rice, sugar, beef, seafood, cotton or wool

OR

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

OR

- tourism – business, eco-tourism or recreational

For the selected commodity, good or service investigate, where applicable:

- the nature of the commodity, good or service
- the process of diffusion of the commodity, good or service and its spatial outcomes
- the changes occurring in the spatial distribution of the production and consumption of the commodity, good or service in Australia and overseas and the geographical factors responsible for these changes
- the role played by technological advances in transport and/or telecommunications in facilitating these changes in spatial distribution
- the role played by governments and enterprises in the internationalisation of the production and consumption of the commodity, good or, service, such as the reduction or elimination of the barriers to movement between countries
- implications of these changes in the nature and spatial distribution of the production and consumption of the commodity, good or, service for people, places and the biophysical environment at a variety of scales, including the local
- likely future changes in the nature and spatial distribution of production and consumption of the commodity, good or service
- the ways people and places embrace, adapt to, or resist the forces of international economic integration and the spatial, economic, social and geopolitical consequences of these responses, such as online retailing and facebooking.

Depth study two

Using fieldwork and/or secondary sources, students investigate an example of the diffusion, adoption and adaptation of **at least one** of the following elements of culture and its consequences for the cultural geography of places (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(s) of culture investigate, where applicable:

- the process of diffusion of the element of culture and its spatial outcomes
- the role played by technological advances in transport and/or telecommunications in the diffusion of the element of culture
- the role played by transnational institutions and/or corporations in the dispersion of the element of culture
- the role played by media and emerging technologies in the generation and dispersion of the element of culture
- implications of changes in the nature and spatial distribution of the element of culture for peoples and places at a range of scales, including the local scale
- the ways people embrace, adapt to, or resist the forces of international cultural integration
- likely future changes in the nature and spatial distribution of the element of culture
- the spatial, economic, social and geopolitical consequences of changes to the element of culture.

Geographical Inquiry and Skills

All the following skills should be taught during the 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 (interviews, questionnaires, student's own experiences, and field observations) and secondary sources (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 technique

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 makes 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

Mapping skills (use of maps and atlases)

- identify and interpret a variety of topographic maps, thematic maps (physical, political, and social maps, overlay maps, synoptic charts and climate maps) and statistical maps (proportional circle and dot distribution maps) at different scales (local, national and global)
- understand and interpret marginal information represented on maps (title, conventional signs 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 general compass directions (8 points) and bearings
- interpret and express scale in written, linear and ratio (representative fraction) formats, and convert scale from one format to another
- apply the map scale to basic calculations to determine distance and area
- interpret relief on a map using contours and spot heights to describe the steepness and shape of a slope (concave, convex and uniform)
- identify different relief features (landforms, including hills, valleys, plains,, spurs, ridges, escarpments, saddles, cliffs) and different types of natural vegetation cover and hydrological features
- construct simple annotated sketch maps using map conventions (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 and describe spatial patterns, including land use, settlement and transport
- identify and describe spatial relationships between natural and cultural features

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, aerial photographs (vertical and oblique), radar imagery and satellite imagery (Landsat, weather satellites and Google Earth)
- 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

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

- calculate and interpret descriptive statistics, including central tendency (arithmetic mean, median, mode) and variation (maximum, minimum and range)
- interpret and apply data from different types of statistical maps (isopleth/isoline, choropleth, proportional circle and dot distribution maps)
- interpret and construct tables and graphs, including: picture graphs; line and bar graphs; scattergrams; climatic graphs; pie graphs; flowcharts and population pyramids
- use simple systems and flow diagrams to organise thinking about relationships
- extrapolate trends over time to forecast future conditions

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 (including Google Earth and Google Maps) to access atlases and remote sensing products (photographs, radar imagery and satellite imagery) for the purpose of identifying and describing spatial patterns and relationships
- access common databases, such as the Bureau of Meteorology, for spatial and statistical information
- use geospatial technologies, including global positioning systems (GPS), to collect and map spatial data
- use simple geographical information systems (GIS) products in description and analysis relevant to the unit content

Fieldwork skills (use of field observations and measurements)

- collect primary data using field techniques, including: surveys and interviews, observing and recording, listening, questioning, sketching and annotating, measuring and counting, photographing and note-taking
- collate field data using techniques, including: listing, tabulating, report writing, graphing, constructing diagrams and mapping
- analyse and interpret primary data

School-based assessment

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

Teachers design school-based assessment tasks to meet the needs of students. The table below provides details of the assessment types for the Geography General Year 12 syllabus and the weighting for each assessment type.

Assessment table – Year 12

Type of assessment	Weighting
<p>Geographical inquiry</p> <p>Students plan and conduct investigations, process and translate information, and communicate findings following ethical protocols and procedures.</p> <p>Both primary and secondary information sources are used.</p> <p>Formats can include: investigation, assignment, report, and/or an oral or multimedia presentation.</p>	30%
<p>Fieldwork/practical skills</p> <p>Fieldwork involves students actively engaged in collecting primary data.</p> <p>Practical skills involve the collection and interpretation of data from a number of sources.</p> <p>Formats can include: excursions, map interpretation, and/or data analysis.</p>	30%
<p>Tests</p> <p>Questions can require students to respond to stimulus material.</p> <p>Formats can include: multiple-choice questions, short responses, sectionalised extended responses, and/or a combination of these.</p>	25%
<p>Externally set task</p> <p>A written task or item or set of items of 50 minutes duration developed by the School Curriculum and Standards Authority and administered by the school.</p>	15%

Teachers are required to use the assessment table to develop an assessment outline for the pair of units.

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).

All assessment types must be included in the assessment outline at least twice with the exception of the externally set task which only occurs once.

The set of assessment tasks must provide a representative sampling of the content for Unit 3 and Unit 4.

Assessment tasks not administered under test/controlled conditions require appropriate validation/authentication processes. This validation process can involve a task, for example, short closed

and/or open questions, questions requiring the analysis of data or an extended response, which is completed in class after the final presentation is submitted.

Externally set task

All students enrolled in the Geography General Year 12 course will complete the externally set task developed by the Authority. Schools are required to administer this task in Term 2 at a time prescribed by the Authority.

Externally set task design brief – Year 12

Time	50 minutes
Format	Written
	Conducted under invigilated conditions
	Typically between two and five questions
	Questions can require students to refer to source material
Content	The Authority informs schools during Term 3 of the previous year of the Unit 3 syllabus content on which the task will be based

Refer to the WACE Manual for further information.

Grading

Schools report student achievement in terms of the following grades:

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

The teacher prepares a ranked list and assigns the student a grade for the pair of units. The grade is based on the student's overall performance as judged by reference to a set of pre-determined standards. These standards are defined by grade descriptions and annotated work samples. The grade descriptions for the Geography General Year 12 syllabus are provided in Appendix 1. They can also be accessed, together with annotated work samples, through the Guide to Grades link on the course page of the Authority website at 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.

Appendix 1 – Grade descriptions Year 12

A	<p>Geographical knowledge and understandings Presents accurate discussions providing detailed information about features, activities, spatial patterns and associations, processes, relationships and/or factors. Makes relevant references to geographical concepts and/or theories.</p>
	<p>Geographical terminology and concepts Uses geographical terminology accurately and applies geographical concepts to develop relevant responses.</p>
	<p>Geographical skills Applies correct geographical thinking, skills and processes, and makes clear links between them. Accurately applies mapping and/or diagrammatic skills and processes in a variety of contexts to support responses. Presents organised effective responses, including extended answers with well-developed sentences and paragraphs.</p>
	<p>Use of supportive evidence Selects and correctly applies a range of appropriate supporting evidence, including examples, quotations, sources, statistics, data, maps and/or sketches when developing responses.</p>
B	<p>Geographical knowledge and understandings Presents accurate generalised discussions providing information about features, activities, spatial patterns and associations, processes, relationships and/or factors. Makes some general, accurate references to geographical concepts and/or theories.</p>
	<p>Geographical terminology and concepts Uses relevant geographical terminology and concepts to develop responses.</p>
	<p>Geographical skills Applies geographical thinking, skills and processes, and makes some links between them. Accurately applies mapping and/or diagrammatic skills and processes to support responses. Presents responses, including extended responses with sentences and paragraphs that address the question.</p>
	<p>Use of supportive evidence Selects and correctly applies supporting evidence, including examples, quotations, sources, statistics, data, maps and/or sketches when developing responses.</p>
C	<p>Geographical knowledge and understandings Presents brief discussions providing basic information about features, activities, spatial patterns and associations, processes, relationships and/or factors. Makes occasional reference to geographical concepts and/or theories.</p>
	<p>Geographical terminology and concepts Uses some geographical terminology and concepts to develop responses.</p>
	<p>Geographical skills Applies some correct geographical thinking, mapping and/or diagrammatic skills and processes that are mostly correct. Accurately applies a small range of skills and processes to support responses. Presents mostly unstructured responses and may include irrelevant information in responses.</p>
	<p>Use of supportive evidence Selects and applies some generalised supporting evidence, including examples, quotations, sources, statistics, maps and/or sketches when developing responses.</p>

D	Geographical knowledge and understandings Presents basic discussions with little detail and no suitable examples. Makes limited reference to geographical concepts and/or theories.
	Geographical terminology and concepts Makes limited use of geographical terminology and concepts.
	Geographical skills Applies limited geographical thinking, mapping and/or diagrammatic skills and processes. Makes limited use of mapping skills and/or processes in some contexts to support responses. Presents mostly unstructured responses, may include incorrect or irrelevant information.
	Use of supportive evidence Makes limited use of evidence to support statements and generalisations.
E	Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade.

Appendix 2 – Glossary

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

Adaptation	Alteration or adjustment in response to a changed environment.
Biophysical 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.
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 of years. This is important in helping students to understand what is happening around them and see their world as dynamic.
Cultural internationalisation	The increasing integration of the different cultures found throughout the world and the diffusion of a dominant 'global culture'. It can be argued that the hybridisation of culture is an outcome of the process.
Diffusion	This is the transfer or dispersal of cultural elements from one group of people to other groups of people.
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 include 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. In contrast to infectious diseases, our understanding of the consequences of chemical exposure for people's health, especially very low level exposures typically found in the environment, remains incomplete.
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.
Economic restructuring	Significant and enduring changes to the nature and structure of an economy.
Ecosystem	A community of plants and animals in a non-living environment.
Environment	The term 'environment', where unqualified, 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 for students to engage with the environment – to observe and investigate in the 'real world' the geographical phenomena, issues and processes studied in the classroom. It also enables students to explore different perspectives or points of view on important geographical issues. 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 students with the opportunity to investigate geographical phenomena not normally accessible due to distance or cost.

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. In short, 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.
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	These are phenomena that occur when the forces of nature combine to become destructive and have potential to damage the environment and endanger communities.
Hybridisation of cultures	The process by which cultures around the world adopt a certain degree of homogenised global culture while clinging to aspects of their own traditional cultures.
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. 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 separate bodies of knowledge.
International integration	Refers to a process whereby the nature of the relationship among economic and cultural entities changes in ways that erode the autonomy or uniqueness of individual nation states and makes them part of a larger aggregation.
Liveability	The quality of space and the built environment. The concept of liveability has been linked to a range of factors, for example, quality of life, health, sense of safety, access to services, cost of living, comfortable living standards, mobility and transport, air quality and social participation.
Mitigation	The ability to moderate 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.

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.
Resilience	The ability to recover or adjust in response to a changed situation.
Risk management	In this curriculum it is defined in terms of preparedness, mitigation and/or prevention of a natural or ecological hazard. Preparedness involves planning the interventions required to prevent or mitigate the effects of a hazard. Mitigation involves the implementation of the strategies to eliminate or minimise the effects of these hazards. Adaptation involves adjusting to the changed environmental circumstances.
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.
Social exclusion	The processes by which individuals and even entire communities are systematically blocked from rights, opportunities and resources, for example, housing, employment, healthcare, civic engagement, democratic participation and due process that are normally available to members of society and which are key to social integration.
Social justice	The concept that all people have the right to fair treatment and equal access to the benefits of society.
Socio-spatial inequality	Social and economic inequalities across space. This includes unequal access to essential goods and services depending on the area or location in which a person lives.

Space	<p>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.</p> <p>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. Students learn to identify and evaluate these consequences and the policies that could be adopted to respond to them.</p> <p>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.</p>
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 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	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • 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.