

# Geography 2025 v1.0

General senior syllabus

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# Queensland syllabuses for senior subjects

In Queensland, a syllabus for a senior subject is an official 'map' of a senior school subject. A syllabus's function is to support schools in delivering the Queensland Certificate of Education (QCE) system through high-quality and high-equity curriculum and assessment.

Syllabuses are based on design principles developed from independent international research about how excellence and equity are promoted in the documents teachers use to develop and enliven the curriculum.

Syllabuses for senior subjects build on student learning in the Prep to Year 10 Australian Curriculum and include General, General (Extension), Senior External Examination (SEE), Applied, Applied (Essential) and Short Course syllabuses.

More information about syllabuses for senior subjects is available at [www.qcaa.qld.edu.au/senior/senior-subjects](http://www.qcaa.qld.edu.au/senior/senior-subjects) and in the 'Queensland curriculum' section of the *QCE and QCIA policy and procedures handbook*.

Teaching, learning and assessment resources will support the implementation of a syllabus for a senior subject. More information about professional resources for senior syllabuses is available on the QCAA website and via the QCAA Portal.

# Course overview

## Rationale

Geography teaches us about the significance of 'place' and 'space' in understanding our world. These two concepts are foundational to the discipline, with the concepts of environment, interconnection, sustainability, scale and change building on this foundation. By observing and measuring spatial, environmental, economic, political, social and cultural factors, geography provides a way of thinking about contemporary challenges and opportunities.

Teaching and learning in Geography are underpinned by inquiry, through which students investigate places in Australia and across the globe. When students think geographically, they observe, gather, organise, analyse and present data and information across a range of scales.

Fieldwork is central to the study of Geography. It provides authentic opportunities for students to engage in real-world applications of geographical skills and thinking, including the collection and representation of data. Fieldwork also encourages participation in collaborative learning and engagement with the world in which students live.

Spatial technologies are also core components of contemporary geography. These technologies provide a real-world experience of Science, Technology, Engineering and Maths (STEM), allowing students to interact with particular geographic phenomena through dynamic, three-dimensional representations that take the familiar form of maps. The skills of spatial visualisation, representation and analysis are highly valued in an increasingly digital and globalised world.

In Geography, students engage in a range of learning experiences that develop their geographical skills and thinking through the exploration of geographical challenges and their effects on people, places and the environment. Students are exposed to a variety of contemporary problems and challenges affecting people and places across the globe, at a range of scales. These challenges include responding to risk in hazard zones, planning sustainable places, managing land cover transformations and planning for population change.

This course of study enables students to appreciate and promote a more sustainable way of life. Through analysing and applying geographical knowledge, students develop an understanding of the complexities involved in sustainable planning and management practices. Geography aims to encourage students to become informed and adaptable so they develop the skills required to interpret global concerns and make genuine and creative contributions to society. It contributes to their development as global citizens who recognise the challenges of sustainability and the implications for their own and others' lives.

# Syllabus objectives

The syllabus objectives outline what students have the opportunity to learn.

**1. Explain geographical processes.**

Students explain geographical processes and interactions that shape the identity of places.

**2. Comprehend geographic patterns.**

Students recognise spatial patterns at global, regional and local scales and identify relationships and implications for people and places.

**3. Analyse geographical data and information.**

Students interpret data and information to infer how the patterns, trends and relationships represent geographical challenges.

**4. Apply geographical understanding.**

Students apply understanding from their analysis to generalise about the impacts of geographical challenges for environments and people.

**5. Propose action.**

Students propose action/s in response to their generalisations to address the impacts of geographical challenges.

**6. Communicate geographical understanding using appropriate forms of geographical communication.**

Students communicate understanding using appropriate forms of geographical communication for a particular purpose.

# Designing a course of study in Geography

Syllabuses are designed for teachers to make professional decisions to tailor curriculum and assessment design and delivery to suit their school context and the goals, aspirations and abilities of their students within the parameters of Queensland's senior phase of learning.

The syllabus is used by teachers to develop curriculum for their school context. The term *course of study* describes the unique curriculum and assessment that students engage with in each school context. A course of study is the product of a series of decisions made by a school to select, organise and contextualise subject matter, integrate complementary and important learning, and create assessment tasks in accordance with syllabus specifications.

It is encouraged that, where possible, a course of study is designed such that teaching, learning and assessment activities are integrated and enlivened in an authentic setting.

## Course structure

Geography is a General senior syllabus. It contains four QCAA-developed units from which schools develop their course of study.

Each unit has been developed with a notional time of 55 hours of teaching and learning, including assessment.

Students should complete Unit 1 and Unit 2 before beginning Units 3 and 4. Units 3 and 4 are studied as a pair.

More information about the requirements for administering senior syllabuses is available in the 'Queensland curriculum' section of the [QCE and QCIA policy and procedures handbook](#).

## Curriculum

Senior syllabuses set out only what is essential while being flexible so teachers can make curriculum decisions to suit their students, school context, resources and expertise.

Within the requirements set out in this syllabus and the [QCE and QCIA policy and procedures handbook](#), schools have autonomy to decide:

- how and when subject matter is delivered
- how, when and why learning experiences are developed, and the context in which learning occurs
- how opportunities are provided in the course of study for explicit and integrated teaching and learning of complementary skills.

These decisions allow teachers to develop a course of study that is rich, engaging and relevant for their students.

## Assessment

Senior syllabuses set out only what is essential while being flexible so teachers can make assessment decisions to suit their students, school context, resources and expertise.

General senior syllabuses contain assessment specifications and conditions for the assessment instruments that must be implemented with Units 3 and 4. These specifications and conditions ensure comparability, equity and validity in assessment.

Within the requirements set out in this syllabus and the [QCE and QCIA policy and procedures handbook](#), schools have autonomy to decide:

- specific assessment task details
- assessment contexts to suit available resources
- how the assessment task will be integrated with teaching and learning activities
- how authentic the task will be.

In Unit 1 and Unit 2, schools:

- develop at least two but no more than four assessments
- complete at least one assessment for each unit
- ensure that each unit objective is assessed at least once.

In Units 3 and 4, schools develop three assessments using the assessment specifications and conditions provided in the syllabus.

More information about assessment in senior syllabuses is available in 'The assessment system' section of the [QCE and QCIA policy and procedures handbook](#).

## Subject matter

Each unit contains a unit description, unit objectives and subject matter. Subject matter is the body of information, mental procedures and psychomotor procedures (see Marzano & Kendall 2007, 2008) that are necessary for students' learning and engagement with the subject.

Subject matter itself is not the specification of learning experiences but provides the basis for the design of student learning experiences.

Subject matter has a direct relationship with the unit objectives and provides statements of learning that have been constructed in a similar way to objectives.



## Aboriginal perspectives and Torres Strait Islander perspectives

The QCAA is committed to reconciliation. As part of its commitment, the QCAA affirms that:

- Aboriginal peoples and Torres Strait Islander peoples are the first Australians, and have the oldest living cultures in human history
- Aboriginal peoples and Torres Strait Islander peoples have strong cultural traditions and speak diverse languages and dialects, other than Standard Australian English
- teaching and learning in Queensland schools should provide opportunities for students to deepen their knowledge of Australia by engaging with the perspectives of Aboriginal peoples and Torres Strait Islander peoples
- positive outcomes for Aboriginal students and Torres Strait Islander students are supported by successfully embedding Aboriginal perspectives and Torres Strait Islander perspectives across planning, teaching and assessing student achievement.

Guidelines about Aboriginal perspectives and Torres Strait Islander perspectives and resources for teaching are available at [www.qcaa.qld.edu.au/k-12-policies/aboriginal-torres-strait-islander-perspectives](http://www.qcaa.qld.edu.au/k-12-policies/aboriginal-torres-strait-islander-perspectives).

Where appropriate, Aboriginal perspectives and Torres Strait Islander perspectives have been embedded in the subject matter.

## Complementary skills

Opportunities for the development of complementary skills have been embedded throughout subject matter. These skills, which overlap and interact with syllabus subject matter, are derived from current education, industry and community expectations and encompass the knowledge, skills, capabilities, behaviours and dispositions that will help students live and work successfully in the 21st century.

These complementary skills are:

- literacy — the knowledge, skills, behaviours and dispositions about language and texts essential for understanding and conveying English language content
- numeracy — the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations, to recognise and understand the role of mathematics in the world, and to develop the dispositions and capacities to use mathematical knowledge and skills purposefully
- 21st century skills — the attributes and skills students need to prepare them for higher education, work, and engagement in a complex and rapidly changing world. These skills include critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and digital literacy. The explanations of associated skills are available at [www.qcaa.qld.edu.au/senior/senior-subjects/general-subjects/21st-century-skills](http://www.qcaa.qld.edu.au/senior/senior-subjects/general-subjects/21st-century-skills).

It is expected that aspects of literacy, numeracy and 21st century skills will be developed by engaging in the learning outlined in this syllabus. Teachers may choose to create additional explicit and intentional opportunities for the development of these skills as they design the course of study.

## **Additional subject-specific information**

Additional subject-specific information has been included to support and inform the development of a course of study.

### **Geographic inquiry**

Geographic inquiry considers place, space, and the interconnections between anthropogenic and biophysical processes that result in geographic questions — where something is, why it is there, how its location influences and is influenced by other phenomena and the resultant impacts of the relationships and patterns. A geographic inquiry can be carried out at a variety of geographical scales. The steps of a geographic inquiry are:

#### **Ask geographic questions**

Geographic questions are used to investigate a geographical challenge and ask:

- Where is the challenge occurring?
- Why is it a challenge in that place?
- What is the impact, i.e. the issue, for the place?
- What is being done to manage the issue, can it be better managed?

#### **Acquire and represent geographic data and information**

Acquiring geographic data and information is achieved through research or fieldwork and includes primary and secondary data and information. Visual representation of geographic data and information is a key skill in geographic understanding. The transformation and representation of data and information into maps and graphs forms the basis of analysis as it allows students to see the patterns and relationships in the data and information.

#### **Analyse geographic data and information**

Analysing geographic data and information is the geographic skill that allows students to derive meaning from the data and information they have collected and represented. It forms the understanding needed to generalise about the impacts of a challenge in a place.

#### **Act on geographic knowledge**

Acting on geographic knowledge is the process of making choices and proposals to address an identified challenge based on the analysis of data and information. A geographic inquiry requires more than just knowledge of a challenge or issue — it requires an informed choice to address the challenge.

## Conducting a case study

Conducting a case study is a structured approach that requires students to analyse, interpret and draw conclusions about a specific geographical issue. The analysis is linked to theories or research in academic literature about the issue and results in recommendations for action or for improving existing conditions. The recommendations are evaluated for suitability to the specific case.

### Steps for conducting a case study

- Define the parameters of the case study as outlined in the subject matter and locate appropriate sources.
- Outline the issue and its implications for, or relationship to, relevant stakeholders.
- Analyse and interpret the data and information and explain the implications of the issue and how the issue links to theories or research in the academic literature.
- Suggest solutions or ideas about how to address the issue and evaluate the solutions or ideas to determine their suitability. Solutions should be linked to relevant theory or practice.

## Fieldwork

Fieldwork is a critical part of learning in Geography. The 'field' refers to a specific area or areas of study outside the classroom environment. Consequently, fieldwork may be conducted within the school grounds, just beyond the perimeter of the school or at specific off-site location/s. It is important to note the fieldwork must be conducted at a local scale to provide the most effective opportunities for the collection of valid and reliable data.

Fieldwork forms the basis of experiential learning in Geography. It provides authentic opportunities for students to engage in investigating and responding to real-world situations while applying a range of geographic skills such as observing, questioning, planning, collecting, recording, evaluating, representing, analysing, concluding, and communicating.

Fieldwork is a mandated requirement of this syllabus, with one field study specified in Unit 3 Topic 2. A minimum of five hours must be spent in the field for this specified field study. It is recommended that a field study also be conducted in Unit 2 Topic 1.

## Report writing structure

In Geography, reports produced for IA2 and IA3 include the following features:

- title page
- introduction — outline of the geographical challenge and purpose of the report
- body — analysis and generalisations organised into appropriate sections and sub-sections, including cartographic and graphic forms and in-text referencing where appropriate
- conclusion — proposal/s
- reference list — if secondary sources are used to produce the report
- appendixes — raw fieldwork data represented in IA2.

Reports may take the form of a student-generated electronic publication, i.e. non-paper form that allows for interaction with the data representations and submitted for Confirmation as an MP4 file.

## **Geographical concepts**

The concepts of population change and demographic change are distinguished by the type of change occurring. Population change refers to the overall change in a population that may result in population decline or population increase, for example due to changing migration rates. Demographic change refers more explicitly to changes in the composition of a population (e.g. age and sex), which results in change for a particular demographic group, such as ageing populations or youth populations.

## **Spatial technologies**

Spatial technologies are the tools used to acquire, manipulate, manage, represent and analyse data that has a spatial context, and are a mandated aspect of this syllabus. The term 'spatial technologies' is an umbrella term that generally refers to tools such as Global Navigation Satellite Systems (GNSS), Geographic Information Systems (GIS) and remote sensing.

In the context of teaching and learning, spatial technologies allow students to:

- acquire and record spatial information
- manipulate and manage spatial information in its various forms
- represent spatial information in a variety of visual formats such as maps
- analyse spatial information for purposes of recognising spatial patterns, the implications of patterns, or predicting outcomes.

## Geographical skills

The skills listed in the following table represent the cartographic and graphic skills that students should be able to demonstrate at the end of the course of study.

Skill	Activity	Syllabus objectives
<b>Using and creating diagrams and conceptual models</b>	Analyse and annotate block diagrams to explain features and processes	1, 2, 3
	Interpret time series block diagrams that demonstrate change	1, 2, 3
	Use 2D and 3D representations and maps to investigate landscape features, such as transect and profile diagrams	1, 2, 3
	Use contour data to create a cross-section and annotate with natural features such as landforms, natural vegetation, hydrological features and human activities as appropriate	6
	Use conceptual models to identify patterns and make generalisations	4, 5, 6
<b>Cartography — map creation</b>	Draw a sketch map using standard symbols/colours	6
	Use cartographic principles when creating a map	6
	Use spatial technologies to create and annotate maps at an appropriate scale for a specific purpose,	6
	Use data (primary data, including data collected in the field) to create maps and map layers using spatial technologies	6
<b>Fieldwork</b>	Collect and present quantitative and qualitative primary data using field techniques such as observing and recording, interviews and questionnaires, photographing, sketching and annotating, measuring and surveying and using GNSS location data, e.g. GPS	3, 4, 6
	Use topographic maps in the field to identify locations, routes and features	1, 2
	Consider sample size, location/s, time and durations of surveying in the design of surveys and analysis of results	4
	Analyse and interpret primary data collected in the field to explain geographical processes and recognise spatial distribution, geographic patterns and trends	1, 2, 3, 4
	Use fieldwork data to propose responses and predict outcomes	4, 5
<b>Using images</b>	Use, annotate and interpret radar and satellite imagery, aerial photographs and ground-level photographs to explain geographical processes, recognise spatial distributions and communicate geographical understanding	1, 2, 6
	Use combinations of remote sensing images and topographic maps to explain change over time	1, 2, 3

Skill	Activity	Syllabus objectives
<b>Map use — interpretation and analysis</b>	Recognise and use parallels of latitude and meridians of longitude	2
	Understand and use direction, for example the sixteen intermediate compass points	1
	Identify and interpret a variety of maps at different scales (local, regional, national, global) to explain geographical processes and recognise spatial distributions	1, 2
	Compare and interpret different maps to draw conclusions about change over time	1, 2, 3
	Use scales to measure distances and estimate areas on maps	2
	Interpret relief on a map using contours and height information (spot heights), to describe the steepness and shape of a slope and calculate the average gradient	1, 3
	Compare maps with three-dimensional landscape visualisations to explain geographical processes and recognise spatial distributions	1, 2, 3
	Use spatial technologies to analyse map layers/overlays to explain spatial relationships	1, 2, 3
	Interpret and use data from different types of maps (isoline, choropleth, synoptic, proportional symbol, cartograms, flowline and dot maps) to recognise spatial distributions, geographic patterns, trends and/or geographical processes and relationships	1, 2, 3
<b>Mathematics — number operations</b>	Calculate and interpret: percentages (e.g. Lorenz curve); ratios; central tendency (mean, median, mode) using appropriate technologies, e.g. electronic/digital spreadsheets — including formulas; measures of dispersion (e.g. location quotients); variation (maximum, minimum and range); frequency; and correlation (e.g. Spearman's rank).	3, 4
<b>Mathematics — graphs</b>	Select, construct and/or interpret various types of simple and complex graphs such as line graphs, bar graphs, histograms, scattergrams, sector graphs, scatter graphs, ternary graphs, radial diagrams, dispersion diagrams, kite diagrams, logarithmic and semi-logarithmic scales, climate graphs and population pyramids to identify trends, relationships and correlations within and between variables	3, 4, 6
	Use appropriate design principles when creating graphs,	3, 6
	Interpret and describe trends in graphed time series data to recognise spatial distributions	2
	Extrapolate from trends over time to identify challenges, propose action and predict outcomes	3, 4
<b>Mathematics — types of data</b>	Assess available data that facilitates data use and manipulation	3, 4

# Reporting

General information about determining and reporting results for senior syllabuses is provided in the 'Determining and reporting results' section of the [QCE and QCIA policy and procedures handbook](#).

## Reporting standards

Reporting standards are summary statements that describe typical performance at each of the five levels (A–E).

<b>A</b>
<p>The student demonstrates in-depth explanations of geographical processes and interactions and comprehensive recognition of spatial patterns; identification of significant relationships and implications for people and places; astute interpretations and inferences that explain how patterns, trends and relationships represent geographical challenges and discerning use of data and information ; understanding from the analysis to make sophisticated generalisations about impacts of geographic challenges; and insightful proposals in response to geographic challenges that are justified using credible evidence.</p> <p>Geographical understanding is communicated through consistent use of appropriate forms of geographical communication; proficient transformation and representation of geographical data and information in sophisticated cartographic and graphic forms; and accomplished use of geographical terminology and adept use of the conventions of communication.</p>
<b>B</b>
<p>The student demonstrates detailed explanations of geographical processes and interactions and fundamental recognition of spatial patterns; identification of simple relationships and implications for people and places; effective interpretations and inferences that explain how patterns, trends and relationships represent geographical challenges and considered use of data and information ; understanding from the analysis to make reasoned generalisations about impacts of geographic challenges; and simple proposals in response to geographic challenges that are informed by sufficient evidence.</p> <p>Geographical understanding is communicated through use of appropriate forms of geographical communication; competent transformation and representation of geographical data and information in detailed cartographic and graphic forms; and considered use of geographical terminology, and conventions of written communication.</p>
<b>C</b>
<p>The student demonstrates simple explanations of geographical processes and interactions and adequate recognition of spatial patterns; identification of relevant relationships and implications for people and places; simple interpretations and inferences that explain how patterns, trends and relationships represent geographical challenges and appropriate use of data and information ; understanding from the analysis to make fundamental generalisations about impacts of geographic challenges; and relevant proposals in response to geographic challenges that are informed by the analysis .</p> <p>Geographical understanding is communicated through use of relevant forms of geographical communication; adequate transformation and representation of geographical data and information in appropriate cartographic and graphic forms; and appropriate use of geographical terminology and the conventions of written communication.</p>

## D

The student demonstrates vague explanations of geographical processes and interactions and vague recognition of spatial patterns; limited identification of relationships and implications for people and places; vague interpretations and inferences that explain how patterns, trends and relationships represent geographical challenges and narrow use of data and information; understanding from the analysis to make cursory generalisations about impacts of geographic challenges; and vague proposals in response to geographic challenges using minimal evidence.

Understanding is communicated using some forms of geographical communication; minimal transformation and representation of geographical data and information in cartographic and graphic forms; and inconsistent use of geographical terminology, and fragmented use of the conventions of written communication.

## E

The student demonstrates limited explanations of geographical processes and interactions and unclear recognition of spatial patterns; identification of irrelevant relationships and implications for people and places; unclear interpretations and inference that explain how patterns, trends and relationships represent geographical challenges and inadequate use of data and information; understanding from the analysis to make irrelevant generalisations about impacts of geographic challenges; and irrelevant proposals in response to geographic challenges.

Communication uses inappropriate forms of geographical communication; inadequate transformation and representation of geographical data and information in cartographic and graphic forms; and unclear use of geographical terminology, and the conventions of written communication.

## Determining and reporting results

### Unit 1 and Unit 2

Schools make judgments on individual assessment instruments using a method determined by the school. They may use the reporting standards or develop an instrument-specific marking guide (ISMG). Marks are not required for determining a unit result for reporting to the QCAA.

The unit assessment program comprises the assessment instrument/s designed by the school to allow the students to demonstrate the unit objectives. The unit judgment of A–E is made using reporting standards.

Schools report student results for Unit 1 and Unit 2 to the QCAA as satisfactory (S) or unsatisfactory (U). Where appropriate, schools may also report a not rated (NR).

### Units 3 and 4

Schools mark each of the three internal assessment instruments implemented in Units 3 and 4 using ISMGs.

Schools report a provisional mark by criterion to the QCAA for each internal assessment.

Once confirmed by the QCAA, these results will be combined with the result of the external assessment developed and marked by the QCAA.

The QCAA uses these results to determine each student's subject result as a mark out of 100 and as an A–E.



# Units

## Unit 1: Responding to risk and vulnerability in hazard zones

In Unit 1, students develop an understanding of how natural and ecological hazards represent potential sources of harm to human life, health, income and property, and how such hazards may affect elements of the built and natural environments.

Through two case studies, students investigate the risk/s posed by specific hazards in recognised hazard zones, analyse the vulnerability of local communities and identify ways to respond. Students propose action to eliminate or minimise harm to people and the environment in ecological hazard zones.

The use of technologies (including spatial technology) is an integral part of learning for this unit and allows students to develop a range of transferable skills necessary to research, manipulate and represent data.

The learning for this unit consists of two separate and interrelated topics. Each is of equal importance in providing students with the required knowledge and skills to demonstrate understanding of the unit objectives.

### Unit objectives

1. Explain geographical processes and biophysical and anthropogenic interactions that result in hazard zones.
2. Comprehend geographic patterns by recognising spatial patterns of hazard zones at global, regional and local scales, identifying relationships and implications for people and places in these zones.
3. Analyse threat and/or vulnerability data and information to infer how patterns, trends and relationships represent geographical challenges for people and environments in hazard zones.
4. Apply understanding from the analysis to generalise about the impacts of geographical challenges for environments and/or people in hazard zones.
5. Propose action/s in response to the generalisations to manage impacts for people and environments.
6. Communicate understanding using appropriate forms of geographical communication.

## Subject matter

### Topic 1: Natural hazard zones

In Topic 1, students explain the geographical processes that result in geological, geomorphic and atmospheric hazard zones. They recognise the spatial patterns of hazard zones and the implications for people and places. Students investigate natural and anthropogenic factors to identify why some places are more at risk than others from specific types of natural hazards and disasters.

Students conduct a case study of two locations to understand vulnerability and risk in hazard zones for places in less developed and more developed countries. Through their investigation, students understand why people in particular places have a greater or lesser capacity to respond to natural hazards and natural disasters.

- Explain, using a range of representations such as maps, conceptual models, block diagrams, and cross sections, how natural hazards are the result of processes that occur within the earth (geological) on the surface of the earth (geomorphic), in the atmosphere (atmospheric) or a combination of these and may result in natural hazards.
- Recognise hazard zones, represent these on a map (using spatial technologies) and analyse spatial distribution of the hazard to describe geographic patterns and identify the implications for people and environments.
- Explain how the severity of the impacts of natural hazards is influenced by factors such as
  - speed of onset
  - magnitude
  - frequency
  - duration
  - the sequencing and seasonality of events, i.e. random or regular.
- Explain how climate change may affect the severity and incidence of some natural hazards and increase risk.
- Explain the concepts of vulnerability and risk as applied to natural hazard management.

- Conduct a case study to investigate one natural hazard that has affected a place in a less developed country and a place in a more developed country. As part of this case study, students must
  - manipulate, adapt and transform data, using spatial technologies and information and communication technologies, to represent and describe the nature, extent and characteristics of the hazard zone for the case study locations
  - analyse threat and vulnerability data and information (including representations in maps) for each place to explain how these factors contribute to risk for the case study locations including
    - exposure to the hazard (threat)
    - population density and settlement patterns
    - topographic features such as hydrology and elevation
    - level of economic development
    - degree of preparedness
    - the location, speed and effectiveness of emergency responses
    - the use of technologies (including spatial) in responding to natural hazards
  - apply geographical understanding from their analysis to explain the impacts for communities
  - propose preparedness, mitigation, prevention and adaptation strategies to manage risk, referring to practices from various agencies such as NGOs, governments and individuals
  - communicate understanding using appropriate forms of geographical communication.

## Topic 2: Ecological hazard zones

In Topic 2, students explain the geographical processes that result in ecological hazards and hazard zones. They recognise the spatial patterns of hazard zones and the implications for people and environments. Students investigate natural and anthropogenic factors to identify why some places are more vulnerable to ecological hazards than other places.

Students conduct a case study of a selected ecological hazard to understand the factors that contribute to the spread of the hazard and the resulting primary, secondary and tertiary impacts on communities. Students propose action for managing the impacts of a selected ecological hazard. Through their investigation students understand that ecological hazards evident in the world today pose significant management challenges.

- Explain how ecological hazards are the result of biological and anthropogenic processes that have an impact on
  - the physical environment (eco-hazards), e.g. environmental plant and animal invasions, impacts of pollutants on lithosphere, atmosphere, hydrosphere and biosphere
  - human health (diseases), e.g. vector-borne diseases.
- Explain the concepts of vulnerability and risk as applied to ecological hazard management.
- Recognise ecological hazard zones, represent these on a map and analyse spatial distribution to describe geographic patterns and identify the implications for people and places.

- Explain how the severity of the impacts of ecological hazards is influenced by factors such as
  - speed of onset
  - magnitude
  - frequency
  - duration
  - sequencing and seasonality of events, i.e. random or regular.
- Explain how climate change may affect the severity and incidence of some ecological hazards, and increase risk.
- Conduct a case study to investigate how one ecological hazard has affected one community or environment. The scale of study may be regional, national or local. As part of this case study, students must
  - manipulate, adapt and transform data, using spatial and information and communication technologies, to represent and describe the nature, extent and characteristics of the hazard zone for the case study location
  - analyse vulnerability data and information (including representations in maps) to explain how these factors contribute to the risk for the case study location, including those from the following that are relevant to the case study hazard
    - population density and settlement patterns
    - topographic factors such as vegetation cover and catchment condition
    - anthropogenic factors such as access to medical services and waste management mechanisms
    - land use
    - level of economic development
    - climatic conditions
    - degree of preparedness
    - the location, speed and effectiveness of emergency responses
    - aid programs
  - apply geographical understanding from the analysis to identify and explain the impacts of the hazard on the case study location, including social, economic and environmental impacts caused by the selected hazard
  - propose action that will address the identified impacts and reduce risk in the case study location
  - communicate understanding using appropriate forms of geographical communication.

## Unit 2: Planning sustainable places

In Unit 2, students develop an understanding of the challenges of sustainable development for remote, rural and urban places in Australia and a megacity in the developing world. Students investigate the geographical processes and interactions over time and space that have resulted in challenges for places in Australia and megacities in developing countries. Students propose action to improve the sustainability and liveability for a place in Australia and a megacity.

It is recommended that students undertake fieldwork in this unit for Topic 1: Responding to challenges facing a place in Australia. Fieldwork plays a central role in developing geographical skills and understanding. Through experiential learning, students develop the skills necessary to collect, manipulate and explain the meaning of data for a familiar place. Through this field study, students understand that every place, including their own, is faced with the challenge of planning for a more sustainable and liveable future.

The learning for this unit consists of two separate and interrelated topics. Each is of equal importance in providing students with the required knowledge and skills to demonstrate understanding of the unit objectives.

### Unit objectives

1. Explain geographical, processes and physical and anthropogenic interactions that result in places with distinct characteristics (remote, rural, urban, megacity).
2. Comprehend geographic patterns by recognising spatial patterns and indicators of human wellbeing for a megacity, and places in Australia identifying relationships and implications for people and places.
3. Analyse settlement and vulnerability data to infer how patterns, trends and relationships represent geographical challenge for specific places.
4. Apply understanding from the analysis to generalise about the impacts on liveability for people.
5. Propose action/s in response to the generalisations to improve liveability for places.
6. Communicate understanding using appropriate forms of geographical communication.

## Subject matter

### Topic 1: Responding to challenges facing a place in Australia

In Topic 1, students explain geographical processes that have shaped the identity of places in Australia. They recognise the spatial patterns of these places and the implications for people in remote, rural and urban locations. Students investigate a specific geographical challenge in a local area using the geographic inquiry model. This may be investigated through fieldwork.

Students understand the factors that contribute to liveability in the local area investigated and the impacts for people and environments. They propose action to manage an identified challenge to improve the liveability of the local place. Students apply a geographical perspective to understand the challenges to liveability for the local area.

- Explain how remote, rural and urban places in Australia are defined by the Australian Bureau of Statistics (ABS).
- Explain the processes that shape the identity of remote, rural and urban places, including
  - urbanisation
  - suburbanisation
  - counterurbanisation
  - population increase
  - population decline.
- Recognise the spatial patterns of remote, rural and urban places in Australia and represent these on a map, using spatial technologies.
- Explain the factors that have contributed to these patterns (i.e. factors affecting settlement patterns), including: physical factors, such as access to fresh water, soil fertility and other natural resource availability; economic factors, such as resource exploitation, employment and affordability; and social factors, such as access to health and education services.
- Explain the implications for people living in remote, rural and urban places, e.g. provision of goods and services, transport, housing accessibility and affordability.
- Analyse ABS data to explain the changing characteristics of remote, rural and urban places in Australia.
- Explain the geographical challenges facing places in Australia as a result of the changing characteristics of places, including
  - rural and remote places, e.g. employment, provision of health and educational services, transportation connections to major centres, expansion or contraction of industry, isolation and remoteness, access to fresh and affordable food, housing availability and affordability, waste management, fresh water quality and availability, and access to communication technology (e.g. NBN)
  - metropolitan and/or regional cities in Australia, e.g. urban sprawl, gentrification, transport options, environmental degradation, land-use zoning, service provision and management, housing availability and affordability, and waste management.

- Conduct a geographic inquiry (e.g. fieldwork) at a local scale to investigate a specific challenge associated with liveability for a place in Australia (remote, rural or urban) and how this challenge might be managed. As part of this investigation, students must
  - use the geographic inquiry model to investigate a challenge facing a place in Australia
  - identify and collect the data required and appropriate methods for data collection
  - analyse data to describe the nature, location and extent of the selected challenge
  - apply geographical understanding from their analysis to generalise about the impacts on sustainability and liveability for the place in Australia
  - propose action/s for managing the identified impacts to improve liveability and sustainability for the place in Australia
  - transform data and information using cartographic, graphic and mathematical skills, spatial technologies and ICT to communicate understanding.

## **Topic 2: Managing challenges facing a megacity**

In Topic 2, students explain the processes of urbanisation that have resulted in the growth of megacities around the world and how these processes shape the identity of megacities. They recognise the spatial patterns of megacities on Earth's surface and the implications for people and environments. Students investigate a specific geographical challenge by conducting a case study that focuses on one megacity from Africa, Asia or South America.

Students understand the factors that contribute to the growth of an identified megacity. Through their investigation, students understand how urbanisation and megacities are changing the organisation of the world's populations and the challenges for liveability for a specific place. They propose action for managing a geographical challenge in the megacity investigated.

- Explain features of global population growth and the processes of urbanisation that have resulted in the rise of megacities.
- Recognise and represent the spatial patterns of megacity distribution across the world and the spatial change in this pattern over time.
- Explain the impacts of urbanisation and the growth of megacities for human wellbeing and environments using various forms of data and information and spatial technologies. Consider risks and opportunities posed by
  - rate of urban growth
  - population density
  - changing land use and consumption of land
  - formal and informal economies
  - settlement infrastructure and land tenure
  - risk and vulnerability to natural hazards and disasters.

- Explain the challenges for sustainable development facing megacities in less developed countries compared with challenges facing megacities in more developed countries, for example
  - climate change
  - employment
  - housing
  - transport
  - sanitation
  - health and education services
  - provision of fresh water and energy
  - land availability
  - waste management.
- Explain how urban planning can be used in the development of resilient cities to mitigate and adapt to the future impacts of urbanisation.
- Conduct a case study to investigate a geographical challenge in a megacity in a country in Africa, Asia or South America. As part of this case study, students must
  - manipulate, adapt, and transform data, using spatial and information and communication technologies, to represent and describe the nature and extent of urban growth for a selected megacity
  - identify a specific geographical challenge for the selected megacity
  - analyse data and information to describe the nature and extent of the identified challenge
  - apply geographical understanding from their analysis to explain the impacts for people and/or environments in the selected megacity
  - investigate a range of planning strategies that could be used to address the identified challenge for future sustainability and liveability in the selected megacity
  - propose action that will address the identified challenge and improve sustainability and liveability in the megacity investigated.
- Communicate understanding using appropriate forms of geographical communication.



## Unit 3: Responding to land cover transformations

In Unit 3, students develop an understanding of changes to the biophysical environment over time, with a particular focus on land cover transformation and climate change. Through a case study and fieldwork, students investigate the geographical processes, natural and anthropogenic, that have resulted in change to Earth's land cover and climate change and the resulting impacts and challenges posed at global, regional and local scales. Students propose action in response to a land management or water management challenge for a fieldwork location.

Fieldwork plays a central role in Topic 2 of this unit. Through experiential learning, students apply a range of geographic skills to collect, manipulate and explain the meaning of data. Through this field study, students understand that managing land cover change at the local level is required for resilient and sustainable futures.

The learning for this unit consists of two separate and interrelated topics. Each is of equal importance in providing students with the required knowledge and skills to demonstrate understanding of the unit objectives.

### Unit objectives

1. Explain geographical processes and biophysical and anthropogenic interactions that result in land cover change, and a changing climate.
2. Comprehend geographic patterns by recognising spatial patterns of land cover change and indications of climate change identifying relationships and implications for people and places.
3. Analyse climate and land cover data and information to infer how patterns, trends and relationships represent geographical challenges.
4. Apply geographic understanding from the analysis to generalise about the impacts of geographical challenges on biophysical and anthropogenic environments.
5. Propose action/s in response to the generalisations to create or improve the sustainability at a fieldwork location.
6. Communicate understanding using appropriate forms of geographical communication.

## Subject matter

### Topic 1: Land cover transformations and climate change

In Topic 1, students explain the geographical processes that have resulted in land cover transformation and a changing climate and how these processes shape the identity of places. They recognise the spatial patterns of land cover change, the trends in climate change, and the implications for people and places.

Students investigate the challenges climate change poses for the future sustainability of natural environments and human communities. They conduct a case study to understand the impact of climate change on a particular type of land cover. Through their investigation, students understand the interdependence of these processes and the resulting challenges for sustainable responses.

- Recognise the spatial distribution of the different types of land cover, including global, regional and local forests, wetlands, ice, croplands, rangelands and urban land use.
- Explain the interconnection between Earth's physical systems and how changes in land use, such as deforestation, land drainage, land reclamation, resource extraction, intensification of agriculture and pastoralism, coastal modification, and soil and water degradation can interrupt these systems and result in land cover transformation at global, regional and local scales.
- Recognise the spatial patterns of land cover change at a variety of scales, using remotely sensed images and aerial photographs.
- Explain how selected factors, such as world population growth, growing affluence and advances in technology, have had an impact on the rate and extent of land cover change at a variety of scales.
- Explain the concept of anthropogenic biomes.
- Explain, using conceptual models, the key processes and relationships associated with global climatic systems, including
  - global winds
  - precipitation patterns
  - ocean circulation, e.g. El Niño Southern Oscillation (ENSO), Arctic Oscillation, North Atlantic Oscillation or the Indian Ocean Dipole.
- Explain, using evidence, how anthropogenic activity (such as changes in land use) may be influencing climate change.
- Explain the interconnections between land cover change and climate change, including
  - the impact of land cover change on natural carbon sequestration
  - the impact of land cover change on surface reflectivity (albedo).
- Analyse data to interpret indicators of climate change and generalise about the current and future implications for people and environments, including
  - temperature
  - precipitation
  - sea surface temperature.

- Conduct a case study to investigate the effects of climate change on a specific type of land cover (for example, vegetation, ice sheets and glaciers, coral reefs) at a regional or local scale of study. As part of this case study, students must
  - manipulate, adapt or transform data, using spatial and information and communication technologies, to represent and describe the nature and extent of the land cover change being investigated
  - analyse data and information to explain the interconnection between changes in climate on the biophysical processes associated with the specific land cover change
  - apply geographical understanding from their analysis to generalise about the impacts of these changes on people (e.g. health, employment) places (e.g. pattern and location of transport systems, location of hospitals and emergency services, location of energy infrastructure) and environments (e.g. ability to provide ecosystem services)
  - propose responses to adapt to or mitigate (e.g. defend or retreat) the risks associated with climate change and land cover change for future sustainability
  - communicate understanding using appropriate forms of geographical communication.

## Topic 2: Responding to local land cover transformations

In Topic 2, students explain the geographical processes that result in land cover change at a local scale and how these processes shape the identity of places. They understand the interconnections between people and physical systems, and the effects of land cover change on community and the environment at a local level, including for Aboriginal peoples and Torres Strait Islander peoples where appropriate. They recognise the spatial pattern of this land cover change and the implications for people and places. Students investigate a specific local land or water management challenge by conducting fieldwork, using the geographic inquiry model.

Students propose action to manage the identified challenge to improve the sustainability of land use in the local area. Through their fieldwork investigation, students apply a geographical perspective to understand the impacts of land cover change for the biophysical environments, and people in their own community and the challenge of sustainable responses.

- Explain the geographical processes that result in particular physical features (e.g. dune systems, river systems, deserts, forests, grasslands) that shape the identity of places at a local scale.
- Explain the importance of Aboriginal peoples' and Torres Strait Islander peoples' connection to Country/Place and their understanding of natural features and elements of the local ecosystem/s, e.g. dune systems, river systems, deserts, forests, grasslands.
- Interpret land use maps to identify where changing land cover (e.g. deforestation, land reclamation, agricultural practices, urbanisation, land drainage, pastoralism, mining) has had an impact on the biophysical environment in a local area.
- Explain Aboriginal peoples' and Torres Strait Islander peoples' care for land (as applicable to their local area, where relevant) and the impacts of these practices on land cover over time.
- Explain geographical processes that have contributed to land cover change in a local area, including
  - anthropogenic processes, e.g. urbanisation, agriculture and resource exploitation
  - natural processes, e.g. weather, natural hazards.
- Recognise the spatial changes to land cover at a local level and represent these on maps using spatial technologies.

- Explain the implications for environments and people of the changing land cover, including on spiritual and cultural features of value for Aboriginal peoples and Torres Strait Islander peoples, where appropriate.
- Explain a local land or water management challenge using a conceptual model, e.g. threats to biodiversity, reduced water quality or availability, diminished riparian health, salinity, loss of coastal protection through diminished mangroves or dune systems, waste management (e.g. landfill), coral reef loss or destruction.
- Conduct a field study (for assessment purposes) to collect primary data for investigating a land management or water management challenge as a result of land cover change on a local scale. As part of this field study, students must
  - use geographic inquiry to carry out fieldwork for investigating a local land management or water management challenge
  - identify data required and appropriate methods for data collection
  - analyse data gathered in the field to explain the nature, location and extent of the challenge
  - apply geographical understanding from their analysis to generalise about the impacts on people, including Aboriginal peoples and Torres Strait Islander peoples, where appropriate, and the sustainability of the environment for the place being investigated
  - propose action in response to the generalisations to address the land management or water management challenge to create or improve the sustainability at the fieldwork location
  - transform primary data collected in the field using cartographic, graphic and mathematical skills, spatial technologies and ICT to communicate findings in a fieldwork report.

## Unit 4: Managing population change

In Unit 4, students develop an understanding of population change, movement and distribution over space and time, and how governments, organisations and individuals respond to the challenges posed by demographic change.

Through a geographic inquiry and a case study, students investigate, using demographic concepts and models, the key dynamics of populations and the impacts of demographic change on places of origin and destination at global, regional and local scales. Students propose action for sustainable management of a challenge posed by demographic change for a place in Australia.

The use of data and spatial and information and communication technologies is integral to this unit. It contributes to students' development as global citizens who recognise the challenges of population change and implications for managing these changes.

The learning for this unit consists of two separate and interrelated topics. Each is of equal importance in providing students with the required knowledge and skills to demonstrate understanding of the unit objectives.

### Unit objectives

1. Explain geographical processes and interactions that result in patterns of demographic and/or population change.
2. Comprehend geographic patterns by recognising spatial patterns of demographic and/or population change identifying relationships and implications for people and places.
3. Analyse data and information to infer how patterns, trends and relationships represent geographical challenges for specific places.
4. Apply geographical understanding from the analysis to generalise about the impacts of demographic and/or population change for places.
5. Propose action in response to generalisations to address an identified challenge for a place in Australia.
6. Communicate understanding using appropriate forms of geographical communication.

## Subject matter

### Topic 1: Population challenges in Australia

In Topic 1, students explain the geographical processes that result in population and demographic change over time and space. They recognise the spatial patterns of this change and the implications for people and places. Students investigate, through geographic inquiry using primary data, a geographic challenge arising due to demographic or population change for a place in Australia.

Through their geographic inquiry, students understand the nature of demographic or population changes over time and the impact on resulting needs and resources for a community and propose action to manage a specific geographic challenge.

- Explain key demographic concepts, including birth, death and fertility rates, life expectancy, age/sex structure and migration rates.
- Explain how demographic processes result in changes to populations, including rates of natural increase and decrease, and overall population change.
- Explain how changes to populations are influenced by factors such as advances in health care and life expectancy, the changing role of women in society and birth rates, the impact of disease on death rates, migration policies over time, and amenity.
- Analyse primary data (ABS census data) relating to each of the key demographic concepts (birth, death and fertility rates, life expectancy, age/sex structure, and migration rates) to identify population patterns and trends in Australia.
- Recognise and represent the population patterns and trends in each key demographic concept for Australia, using spatial technologies and information and communication technologies.
- Explain implications of demographic and population change (e.g. ageing population, youth population, declining population, rapid population growth, migration) for people and places.
- Conduct a geographic inquiry using primary data (for assessment purposes) to investigate a specific geographic challenge arising from demographic or population change for a selected place in Australia at a local scale and suitable population size, e.g. a regional city, a suburb, or a rural town. As part of this inquiry students must
  - describe the demographic and/or population characteristics for the selected place in Australia
  - recognise and represent demographic and/or population change over time using spatial and information and communication technologies (i.e. cartographic and graphical representations)
  - analyse primary data to identify and explain a demographic and/or population change for the place in Australia (e.g. ageing population, youth population, population decline, rapid population growth)
  - explain the geographical and/or demographic factors that have contributed to the change (e.g. birth and death rates, migration flows, amenity, employment)
  - apply geographical understanding from their analysis to generalise about the impacts of the demographic or population change in the selected place (e.g. resource management, workforce participation, housing, infrastructure)
  - propose action to address the impacts arising from the identified challenge for the place in Australia
  - manipulate, adapt or transform the initial provided data and further gathered primary data using spatial technologies and ICT to prepare data for analysis using cartographic, graphic and mathematical skills, spatial and information and communication technologies to communicate geographical understanding in a data report.

## Topic 2: Global population change

In Topic 2, students explain the geographical processes that result in patterns and trends in global populations and how these changes have been represented over time using models. They recognise the spatial patterns of population distributions and the implications for people and places. Students investigate the demographic and geographic processes that have resulted in the movements of people across the world and the impacts for places of origin and places of destination.

Students conduct a case study to understand variations in the global characteristics of population distributions and the implications of these transitions on places and people. Through their investigation, students develop empathy for and understanding of the reasons people move and the challenges this poses for communities.

- Explain global population characteristics, focusing on demographic concepts of the rate of natural change, including birth rate, death rate, infant mortality rate, fertility rate, life expectancy and age/sex structure.
- Explain the demographic processes that cause variations in the spatial distributions of global population characteristics, including population momentum.
- Explain changes in world population distribution, including internal and international migration since the 1700s, and the projected changes in the 21st century.
- Explain how population trends and characteristics have been described over time using models (e.g. Demographic Transition Model; Rostow's Stages of Growth Model; Wallerstein's World-Systems theory) and decide whether these are still applicable to describe contemporary and projected population changes.
- Recognise current population growth, distribution and density and represent global population patterns in maps, and graphs using spatial technologies and information and communication technologies and identify relationships and implications for people.
- Analyse geographic data represented in maps and graphs to infer how the patterns and trends represent specific challenges at global, regional and local scales.
- Explain the causes of internal migrations, both forced and voluntary, as a result of human factors (including social, cultural, political and economic factors such as conflict, labour supply and demand, family reunion, religious or cultural persecution, poverty, food security, governance) and/or geographical and environmental processes (e.g. large-scale flooding or drought, ecological breakdown).
- Explain the causes of international migrations, both forced and voluntary, as a result of human factors as for internal migrations (including social, cultural, political and economic factors such as conflict, labour supply and demand, family reunion, religious or cultural persecution, poverty, food security, governance), and other factors (e.g. educational opportunities and/or geographic and environmental processes such as large-scale flooding, drought or ecological breakdown) and other factors (e.g. climate change).

- Conduct a case study to identify the impacts on places of origin (e.g. declining populations, gender imbalance, employment opportunities, decline in agricultural production) and places of destination (e.g. urbanisation, ghettoisation, resource availability) as a result of internal or international migrations. As part of this case study, students should
  - explain the geographical processes that have resulted in migration (internal and/or international) to the place under investigation
  - manipulate, adapt and transform data, using spatial and information and communication technologies to represent and describe the geographic patterns and trends in population flows for the place under investigation
  - analyse data and information to explain the changing characteristics of populations for the place under investigation as a result of migration (internal and/or international), e.g. population growth rates and population density, and the changing characteristics of the place/places of origin, e.g. declining populations, change age/sex structure
  - apply geographical understanding from their analysis to identify the impacts on places of origin (e.g. workforce structure, population momentum) and the impacts on the place of destination (e.g. ghettoisation, urbanisation, cultural and ethnic diversity) being investigated
  - identify and describe current or future responses to population change (e.g. national or regional strategies and initiatives, non-government responses, international or governmental agreements)
  - communicate understanding using appropriate forms of geographical communication.



# Assessment

## Internal assessment 1: Examination — combination response (25%)

### Assessment objectives

1. Explain interactions between biophysical and anthropogenic processes that result in land cover change and a changing climate.
2. Comprehend geographic patterns by recognising spatial patterns of land cover change and indications of climate change at global, regional and local scales, identifying relationships and implications for people and places.
3. Analyse climate and land cover data and information to infer how patterns, trends and relationships represent a geographical challenge in relation to climate change for a selected land cover type.
4. Apply geographic understanding from the analysis to generalise about the impacts of the geographical challenge on biophysical and anthropogenic environments.
6. Communicate geographical understanding using appropriate forms of geographical communication.

### Specifications

The teacher provides an examination that:

- relates to Unit 3 Topic 1
- is a combination of short response and extended response questions
- contains short response questions that may ask students to
  - measure, calculate, annotate, draw, label
  - respond using bullet points, sentences or paragraphs.

### Question specifications

The examination must be aligned to the specifications provided in the table below.

Focus of question	Mark allocation	Objective	In these questions, students:
Short response	10	1, 2	<ul style="list-style-type: none"><li>• explain processes, recognise spatial patterns, identify relationships and implications</li></ul>
Extended response (1 question)	8	3, 4	<ul style="list-style-type: none"><li>• analyse data and information, apply understanding, make generalisations</li></ul>
All questions	7	6	<ul style="list-style-type: none"><li>• communicate understanding</li></ul>

## Stimulus specifications

The teacher:

- provides unseen stimulus for the extended response question that
  - is succinct enough for students to engage with in the planning time
  - consists largely of visual texts that can be analysed, e.g. maps, graphs, diagrams
  - fits on one side of an A3 page or two single-sided A4 pages
  - if written, consists of one text of up to 150 words
- may provide unseen, visual stimulus that can be used to assess Objectives 1 or 2 in a short response question.

## Conditions

- This is an individual supervised task.
- Time allowed
  - Planning time: 15 minutes
  - Working time: 120 minutes
- Students may bring into the examination
  - a QCAA-approved non-programmable calculator
  - rulers free from markings other than measurement indicators.

## Mark allocation

Criterion	Assessment objectives	Marks
Explaining	1	5
Comprehending	2	5
Analysing and Applying	3, 4	8
Communicating	6	7
<b>Total marks:</b>		<b>25</b>

## Instrument-specific marking guide

Explaining	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• detailed explanations of interactions between biophysical and anthropogenic processes that result in land cover change</li> <li>• detailed explanations of interactions between biophysical and anthropogenic processes that result in climate change</li> <li>• explanations of complex relationships between land cover change and climate change</li> </ul>	4–5
<ul style="list-style-type: none"> <li>• simple explanations of interactions between biophysical and anthropogenic process that result in land cover change</li> <li>• simple explanations of interactions between biophysical and anthropogenic process that result in climate change</li> <li>• explanations of simple relationships between land cover change and climate change</li> </ul>	2–3
<ul style="list-style-type: none"> <li>• unclear explanation of interactions between biophysical and anthropogenic processes that result in land cover change</li> <li>• unclear explanation of interactions between biophysical and anthropogenic processes that result in climate change</li> <li>• vague explanation of relationships between land cover change and climate change.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Comprehending	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• recognition of comprehensive spatial patterns of land cover change</li> <li>• recognition of critical indications of climate change</li> <li>• identification of significant relationships and implications for people and/or places</li> </ul>	4–5
<ul style="list-style-type: none"> <li>• recognition of simple spatial patterns of land cover change</li> <li>• recognition of fundamental indications of climate change</li> <li>• identification of rudimentary relationships and implications for people and/or places</li> </ul>	2–3
<ul style="list-style-type: none"> <li>• vague recognition of spatial patterns of land cover change</li> <li>• vague recognition of indications of climate change</li> <li>• identification of irrelevant relationships and/or implications for people and places.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Analysing and Applying	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• astute interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge</li> <li>• discerning use of data and information</li> <li>• sophisticated generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• logical interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge</li> <li>• considered use of data and information</li> <li>• reasoned generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• simple interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge</li> <li>• appropriate use of data and information</li> <li>• fundamental generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• vague interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge</li> <li>• minimal use of data and information</li> <li>• narrow generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments.</li> </ul>	1–2
The student response does not match any of the descriptors above.	0

Communicating	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• consistently uses appropriate forms of geographical communication</li> <li>• accomplished use of geographical terminology</li> <li>• adept use of the conventions of written communication</li> </ul>	6–7
<ul style="list-style-type: none"> <li>• uses appropriate forms of geographical communication</li> <li>• considered use of geographical terminology</li> <li>• purposeful use of the conventions of written communication</li> </ul>	4–5
<ul style="list-style-type: none"> <li>• uses relevant forms of geographical communication</li> <li>• appropriate use of geographical terminology</li> <li>• sufficient use of the conventions of written communication</li> </ul>	2–3
<ul style="list-style-type: none"> <li>• uses inappropriate forms of geographical communication</li> <li>• inconsistent use of geographical terminology</li> <li>• fragmented use of the conventions of written communication.</li> </ul>	1
The student response does not match any of the descriptors above.	0

## Internal assessment 2: Field report (25%)

Students investigate a land-management or water-management challenge arising from land cover transformation at a local scale through fieldwork. They present the findings of the fieldwork investigation as a report.

### Assessment objectives

1. Explain biophysical and anthropogenic processes and interactions that result in land cover change at the fieldwork location.
2. Comprehend geographic patterns by recognising spatial patterns of land cover change for the fieldwork location, and implications for people and places.
3. Analyse fieldwork data to infer how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location.
4. Apply geographic understanding from the analysis to generalise about the impacts of the geographical challenge at the fieldwork location.
5. Propose action/s in response to the generalisations to create or improve sustainability at the fieldwork location.
6. Communicate understanding using appropriate forms of geographical communication in a fieldwork report.

### Specifications

This task requires students to:

- focus on Unit 3 Topic 2
- collect, analyse and interpret geographical data and information gathered in the field
- explain the processes and interactions that result in land cover change at the fieldwork location
- generalise about the impacts of the land cover change at the fieldwork location
- propose action to address the impacts identified for the fieldwork location
- present their findings in a written report that follows the report writing structure for Geography.

It is recommended that this task is designed so that students can develop a response in approximately 15 hours of class time.

### Conditions

- Students can develop their responses in class time and their own time.
- This is an individual task.
- The following aspects of the task may be completed as a group
  - data collection.

## Response requirements

- Written: up to 2000 words
- Students need to use spatial technologies and/or ICT to visually represent primary data and information collected in the field to
  - create maps and graphs
  - overlay or annotate downloaded or photocopied maps.

## Mark allocation

Criterion	Assessment objectives	Marks
Explaining and Comprehending	1, 2	5
Analysing and Applying	3, 4	10
Proposing action	5	5
Communicating	6	5
<b>Total marks:</b>		<b>25</b>

## Instrument-specific marking guide

Explaining and Comprehending	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• detailed explanation of biophysical and anthropogenic processes and interactions that result in land cover change for the fieldwork location</li> <li>• recognition of comprehensive spatial patterns of land cover change for the fieldwork location</li> <li>• recognition of significant relationships and implications for people and places</li> </ul>	4–5
<ul style="list-style-type: none"> <li>• adequate explanation of biophysical and anthropogenic processes and interactions that result in land cover change for the fieldwork location</li> <li>• recognition of simple spatial patterns of land cover change for the fieldwork location</li> <li>• recognition of rudimentary relationships and implications for people and places</li> </ul>	2–3
<ul style="list-style-type: none"> <li>• unclear explanation of biophysical and anthropogenic processes and interactions that result in land cover change for the fieldwork location</li> <li>• vague recognition of spatial patterns of land cover change for the fieldwork location</li> <li>• recognition of irrelevant relationships and implications for people and places.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Analysing and Applying	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• astute interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location</li> <li>• discerning use of fieldwork data and information</li> <li>• sophisticated generalisations about the impacts of the geographical challenge at the fieldwork location</li> </ul>	9–10
<ul style="list-style-type: none"> <li>• effective interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location</li> <li>• considered use of fieldwork data and information</li> <li>• reasoned generalisations about the impacts of the geographical challenge at the fieldwork location</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• simple interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location</li> <li>• appropriate use of fieldwork data and information</li> <li>• fundamental generalisations about the impacts of the geographical challenge at the fieldwork location</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• superficial interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location</li> <li>• narrow use of fieldwork data and information</li> <li>• cursory generalisations about the impacts of the geographical challenge at the fieldwork location</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• vague interpretations and inferences about how patterns, trends and relationships represent a geographical challenge arising from land cover change at the fieldwork location</li> <li>• fragmented use of fieldwork data and information</li> <li>• narrow generalisations about the impacts of the geographical challenge at the fieldwork location.</li> </ul>	1–2
The student response does not match any of the descriptors above.	0

Proposing action	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>insightful proposal/s in response to the generalisations</li> <li>justified action to create or improve the sustainability at the fieldwork location</li> <li>uses credible evidence to support the proposal</li> </ul>	4–5
<ul style="list-style-type: none"> <li>simple proposal/s in response to the generalisations</li> <li>informed action to create or improve the sustainability at the fieldwork location</li> <li>uses sufficient evidence to support the action</li> </ul>	2–3
<ul style="list-style-type: none"> <li>irrelevant proposal in response to the generalisations</li> <li>action proposed is vague</li> <li>uses minimal evidence to inform action.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Communicating	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>proficient transformation and representation of geographical data and information</li> <li>creates sophisticated cartographic forms</li> <li>creates sophisticated graphic forms</li> <li>accomplished use of geographical terminology</li> <li>adept use of the conventions of written communication</li> </ul>	4–5
<ul style="list-style-type: none"> <li>adequate transformation and representation of geographical data and information</li> <li>creates simple cartographic forms</li> <li>creates simple graphic forms</li> <li>considered use of geographical terminology</li> <li>purposeful use of the conventions of written communication</li> </ul>	2–3
<ul style="list-style-type: none"> <li>minimal transformation and representation of geographical data and information</li> <li>creates inappropriate cartographic forms</li> <li>creates inappropriate graphic forms</li> <li>inconsistent use of geographical terminology</li> <li>fragmented use of the conventions of written communication.</li> </ul>	1
The student response does not match any of the descriptors above.	0



## Internal assessment 3: Data report (25%)

Students research an Australian demographic or population challenge for a place in Australia. They use a range of data transformation and analysis to create a data report.

### Assessment objectives

1. Explain geographical processes and interactions that results in demographic or population change for a place in Australia.
2. Comprehend geographic patterns by recognising spatial patterns of demographic or population change for a place identifying relationships and implications for people and place.
3. Analyse data and information to infer how patterns, trends and relationships represent a geographical challenge/s for a place in Australia.
4. Apply geographical understanding from the analysis to generalise about the impacts of the geographical for people and/or place.
5. Propose action in response to the generalisations to address the identified challenge for the place in Australia.
6. Communicate understanding using appropriate forms of geographical communication in a data report.

### Specifications

This task requires students to:

- focus on Unit 4 Topic 1
- transform and interpret the teacher-provided data to identify a demographic or population change for a place
- research, transform and analyse additional primary data to make inferences about a geographical challenge arising from the identified demographic or population change
- generalise about the impacts of the geographical challenge
- propose action to address the identified impacts
- present their findings in a written report that follows the report writing structure for Geography.

It is recommended that this task is designed so that students can develop a response in approximately 15 hours of class time.

### Stimulus specifications

The teacher provides the initial stimulus for the investigation. This must be unprocessed, primary data of a fundamental nature that clearly reflects demographic or population change for a place.

## Conditions

- Students can develop their responses in class time and their own time.
- This is an individual task.

## Response requirements

- Written: up to 2000 words
- Students need to
  - use spatial technologies and/or ICT to generate maps and graphs
  - adapt downloaded or photocopied maps (e.g. with overlays and annotations) to represent their researched data and information.

## Mark allocation

Criterion	Assessment objectives	Marks
Explaining and Comprehending	1, 2	4
Analysing and Applying	3, 4	10
Proposing action	5	4
Communicating	6	7
<b>Total marks:</b>		25

## Instrument-specific marking guide

Explaining and Comprehending	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• detailed explanation of geographic processes and interactions that result in demographic or population change for a place in Australia</li> <li>• recognition of comprehensive spatial patterns of demographic or population change for a place in Australia</li> <li>• recognition of significant relationships and implications for people and/or place</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• adequate explanation of geographic processes and interactions that result in demographic or population change for a place in Australia</li> <li>• recognition of simple spatial patterns of demographic or population change</li> <li>• recognition of rudimentary relationships and implications of demographic change for people and/or place</li> </ul>	2
<ul style="list-style-type: none"> <li>• unclear explanation of geographic processes and interactions that result in demographic or population change for a place in Australia</li> <li>• vague recognition of spatial patterns of demographic or population change</li> <li>• recognition of irrelevant relationships and implications for people and/or place.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Analysing and Applying	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>• astute interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge/s for a place in Australia</li> <li>• discerning use of data and information</li> <li>• sophisticated generalisations about the impacts of the geographical challenge for people and/or places</li> </ul>	9–10
<ul style="list-style-type: none"> <li>• effective interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge/s for a place in Australia</li> <li>• considered use of relevant data and information</li> <li>• reasoned generalisations about the impacts of the geographical challenge for people and/or places</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• simple interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge/s for a place in Australia</li> <li>• appropriate use of relevant data and information</li> <li>• fundamental generalisations about the impacts of the geographical challenge for people and/or places</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• superficial interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge/s for a specific place in Australia</li> <li>• narrow use of relevant data and information</li> <li>• cursory generalisations about the impacts of the geographical challenge for people and/or places</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• vague interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge/s for a place in Australia</li> <li>• fragmented use of data and information</li> <li>• narrow generalisations about the impacts of the geographical challenge for people and/or places.</li> </ul>	1–2
The student response does not match any of the descriptors above.	0

Proposing action	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>insightful proposal/s in response to generalisations</li> <li>justified action to address the impact/s of the identified challenge</li> <li>uses credible evidence to support the action</li> </ul>	3–4
<ul style="list-style-type: none"> <li>simple proposal/s in response to the generalisations</li> <li>informed action to address the impact/s of the identified challenge</li> <li>uses sufficient evidence to support the action</li> </ul>	2
<ul style="list-style-type: none"> <li>irrelevant proposal in response to the generalisations</li> <li>action proposed is vague</li> <li>uses minimal evidence to support action.</li> </ul>	1
The student response does not match any of the descriptors above.	0

Communicating	Marks
The student response has the following characteristics:	
<ul style="list-style-type: none"> <li>proficient transformation and representation of geographical data and information</li> <li>creates sophisticated cartographic forms</li> <li>creates sophisticated graphic forms</li> <li>accomplished use of geographical terminology</li> <li>adept use of the conventions of written communication</li> </ul>	6–7
<ul style="list-style-type: none"> <li>competent transformation and representation of geographical data and information</li> <li>creates detailed cartographic forms</li> <li>creates detailed graphic forms</li> <li>considered use of geographical terminology</li> <li>purposeful use of the conventions of written communication</li> </ul>	4–5
<ul style="list-style-type: none"> <li>adequate transformation and representation of geographical data and information</li> <li>creates simple cartographic forms</li> <li>creates simple graphic forms</li> <li>appropriate use of geographical terminology</li> <li>suitable use of the conventions of written communication.</li> </ul>	2–3
<ul style="list-style-type: none"> <li>minimal transformation and representation of geographical data and information</li> <li>creates inappropriate cartographic</li> <li>creates inappropriate graphic forms</li> <li>inconsistent use of geographical terminology</li> <li>fragmented use of the conventions of written communication.</li> </ul>	1
The student response does not match any of the descriptors above.	0

# External assessment: Examination — combination response (25%)

External assessment is developed and marked by the QCAA. The external assessment in Geography is common to all schools and administered under the same conditions, at the same time, on the same day.

## Assessment objectives

1. Explain the interactions of geographical and demographic processes that shape the identity of places and result in demographic and/or population change.
2. Comprehend geographic patterns by recognising spatial patterns of demographic and/or population change for places at global, regional and local scales, identifying relationships and implications for people and places.
3. Analyse data and information to infer how patterns, trends and relationships represent a geographical challenge in relation to demographic and/or population change.
4. Apply geographical understanding from the analysis to generalise about the impacts of demographic and/or population change for places of origin, and places of destination.
6. Communicate understanding using appropriate forms of geographical communication.

## Specifications

This examination:

- relates to Unit 4 Topic 2
- may ask students to
  - respond using bullet points, sentences or paragraphs
  - explain processes, recognise spatial patterns, identify relationships and implications
  - analyse data and information, make inferences, apply understanding, and make generalisations
  - measure, calculate, annotate, draw, label.

## Stimulus specifications

The QCAA provides stimulus materials that:

- consist of visual texts, e.g. maps, graphs, statistics, infographics, images, diagrams, minimal text
- include context statements for each piece of stimulus in the form of a title or brief description that may include source of data, and any general details about the purpose or construction of the stimulus.

## Conditions

- Time allowed
  - Planning time: 15 minutes
  - Working time: 120 minutes
- Students may bring into the examination
  - pencils, erasers, rulers free from markings other than measurement indicators
  - QCAA-approved non-programmable calculators.

# Glossary

The syllabus glossary is available at [www.qcaa.qld.edu.au/downloads/senior-qce/common/snr\\_glossary\\_cognitive\\_verbs.pdf](http://www.qcaa.qld.edu.au/downloads/senior-qce/common/snr_glossary_cognitive_verbs.pdf).

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## Version history

Version	Date of change	Information
1.0	January 2024	Released for familiarisation and planning (with implementation starting in 2025)



