# Numeracy 2025 v1.1

Short Course senior syllabus October 2024





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Queensland Curriculum & Assessment Authority PO Box 307 Spring Hill QLD 4004 Australia

Phone: (07) 3864 0299 Email: office@qcaa.qld.edu.au Website: www.qcaa.qld.edu.au

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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 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

Numeracy is considered integral to a person's ability to function effectively in society. It involves drawing on knowledge of the context in deciding when to use mathematics, extracting the mathematical information from the context and choosing the appropriate mathematics to use.

When students become numerate, they can manage situations or solve problems in real contexts such as everyday life, work and further learning. Students are able to identify or locate, act upon, interpret and communicate mathematical ideas and information. They learn to represent these ideas and information in a number of ways. This learning should take place in real contexts that are relevant, cooperative, supportive, enjoyable and non-competitive.

Numeracy is embedded across the school curriculum and is developed through all phases of learning. This Numeracy Short Course is a one-unit course of study, developed to meet the numeracy requirements of the Queensland Certificate of Education (QCE). Results in this course do not contribute to an Australian Tertiary Admission Rank (ATAR) calculation.

This course has been designed to align with Level 3 of the Australian Core Skills Framework (ACSF)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Department of Education, Employment and Welfare 2012, Australian Core Skills Framework, Commonwealth of Australia, Canberra, https://www.dewr.gov.au/skills-information-training-providers/resources/australian-core-skills-framework

### Syllabus objectives

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

#### 1. Identify and interpret mathematical information.

When students identify and interpret mathematical information, they extract the mathematics embedded in a contextualised task and recognise features of remembered information. They recognise relevant concepts, rules, definitions, techniques and algorithms.

#### 2. Use and apply mathematical knowledge.

When students use and apply mathematical knowledge, they process problems, put into effect relevant concepts, rules, definitions, techniques and algorithms. They perform calculations with technology.

#### 3. Communicate and represent mathematical knowledge.

When students communicate and represent mathematical knowledge, they use mathematical language (terminology, symbols, conventions and representations) and everyday language. They organise and present information in graphic and symbolic form. They represent the results and outcomes of mathematical process.

### Designing a course of study in Numeracy

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**

Numeracy is a Short Course senior syllabus. It contains two QCAA-developed topics from which schools develop their course of study.

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

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.

Short Course senior syllabuses contain assessment specifications and conditions for the assessment instruments that schools select from and implement with Topics 1 and 2. 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 Topics 1 and 2, schools develop two 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 topic contains a description, 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 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.

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.

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.

### Course of study

As part of designing a course of study from this syllabus, schools must decide:

- what *numeracy skills* are covered in Topic 1 and Topic 2 ensuring that all numeracy skills are covered at least once by the end of the course
- how, when and why learning experiences are developed ensuring that they are relevant to the topics of Personal identity and community, and Workplace and employment.

### **Topic 1: Personal identity and community**

Students develop the numeracy skills selected by their teacher through activities that relate to expressing personal identity, achieving personal goals, and understanding and interacting with the wider community. Students use mathematics knowledge to make sense of situations in a real context for a social or personal purpose.

### **Topic 2: Workplace and employment**

Students develop the numeracy skills selected by their teacher through activities that relate to preparing for and seeking employment, operating in an existing workplace, and/or entering a new work setting. They deal with situations in real contexts that involve the use of a range of workplace relevant mathematical knowledge and skills.

### Numeracy skills (NS)

Teachers will select from the numeracy skills stated below when designing a course of study from this syllabus. They will identify which numeracy skill will be developed in each topic — ensuring that each of the skills will be taught by the end of the course.

Number and algebra (N&A)

- Recognise and use whole numbers, fractions, decimals and percentages.
- Use technology to complete simple calculations involving whole numbers, fractions, decimals and percentages, and where appropriate converting between equivalent forms, e.g. 20% or 1/5 of \$250.
- Use and apply rates and ratios in simple situations, e.g. km/hr (kilometres per hour), \$/kg (dollars per kilogram) or \$/m (dollars per metre).

Measurement and space (M&S)

- Convert between metric units for length including mm (millimetre), cm (centimetre), m (metre) and km (kilometre).
- Recognise 2D shapes, including triangles, rectangles and circles.
- Use properties of 2D shapes, including number of sides to describe and draw everyday objects.
- Convert between metric units for area including mm<sup>2</sup> (square millimetre), cm<sup>2</sup> (square centimetre), m<sup>2</sup> (square metre) and km<sup>2</sup> (square kilometre).
- Measure, estimate and calculate length and perimeter of 2D shapes.

- Measure, estimate and calculate area of 2D shapes, including
  - Rectangle:  $A = L \times W$
  - Square:  $A = S \times S$
  - Triangle:  $A = \frac{B \times H}{2}$  where *B* is the base length and *H* is the perpendicular height
  - All shapes: counting squares.
- Recognise 3D shapes, including prisms and cylinders.
- Use properties of 3D shapes, including number of faces and the shape of each face to describe everyday objects.
- Measure, estimate and calculate volume of prisms using  $V = A \times H$  where A is the area of the base and H is the perpendicular height.
- Measure, estimate and calculate time, including use of dates and 24-hour times.
- Measure, estimate and calculate mass, capacity and temperature.
- Convert between metric units for volume including mm<sup>3</sup> (cubic millimetre), cm<sup>3</sup> (cubic centimetre), m<sup>3</sup> (cubic metre) and km<sup>3</sup> (cubic kilometre).
- Convert between metric units for mass including mg (milligram), g (gram), kg (kilogram), t (tonne).
- Convert between metric units for capacity including ml (millilitre), I (litre), kl (kilolitre), ML (megalitre).
- Recognise and use common angles, including
  - full rotation: 360°
  - half rotation: 180°
  - right angle: 90°
- Use distance, direction, coordinates, simple scales, labels, symbols and keys using everyday maps and plans.

#### Statistics and probability (S&P)

- Collect, use and organise data including in tables, bar graphs and line graphs using simple scales and axes.
- Describe the likelihood of common chance events using appropriate terms (e.g. certain, likely, impossible and using fractions, decimals or percentages).
- Determine the likelihood of common chance events (e.g. rolling a six on a dice) using  $Pr(Event) = \frac{Number of favourable outcomes}{Number of total outcomes}$
- Express probabilities formally using simple fractions, decimals and percentages.

### 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).

#### Α

The student identifies and interprets comprehensive mathematical information, uses and applies comprehensive mathematical knowledge, and communicates and represents comprehensive mathematical knowledge drawn from Number and Algebra, Measurement and Space, and Probability and Statistics in simple familiar situations.

#### В

The student identifies and interprets thorough mathematical information, uses and applies thorough mathematical knowledge, and communicates and represents thorough mathematical knowledge drawn from Number and Algebra, Measurement and Space, and Probability and Statistics in simple familiar situations.

#### С

The student identifies and interprets mathematical information, uses and applies mathematical knowledge, and communicates and represents mathematical knowledge drawn from Number and Algebra, Measurement and Space, and Probability and Statistics in simple familiar situations.

#### D

The student identifies and interprets partial mathematical information, uses and applies mathematical partial knowledge, and communicates and represents partial mathematical knowledge drawn from Number and Algebra, Measurement and Space, and Probability and Statistics in simple familiar situations.

#### Ε

The student identifies and interprets isolated mathematical information, uses and applies isolated mathematical knowledge, and communicates and represents isolated mathematical knowledge drawn from Number and Algebra, Measurement and Space, and Probability and Statistics in simple familiar situations.

### **Determining and reporting results**

Schools make A–E judgments on individual assessment instruments.

Schools also determine a final subject result by making an on-balance judgment using evidence in a folio matched to the reporting standards.

The folio includes responses to the two school-developed assessment instruments, which provide evidence of achievement in relation to the objectives of the syllabus and standards matched to the instrument-specific standards (ISS).

Schools report the subject result to the QCAA as an A–E or, where appropriate, a not rated (NR) in the case of an NR for one or both instruments.

# Topics

### **Topic 1: Personal identity and community**

In Topic 1, students develop the numeracy skills selected by their teacher through activities that relate to expressing personal identity, achieving personal goals, and understanding and interacting with the wider community.

Students use mathematics to make sense of the world and learn to apply mathematics in a context for a social purpose. They learn to apply numeracy skills and mathematics in structured learning situations, whether learning towards a formal qualification, learning within a community-based program, or formal or informal on-the-job learning and training.

### **Objectives**

- 1. Identify and interpret mathematical information in the context of personal identity and community.
- 2. Use and apply mathematical knowledge in the context of personal identity and community.
- 3. Communicate and represent mathematical knowledge in the context of personal identity and community.

### Subject matter

- Recall, use and communicate mathematical knowledge from the relevant selected numeracy skills within Number and algebra, Measurement and space, and/or Statistics and probability (see Additional subject-specific information section for a detailed list of the specific skills).
- Apply these selected numeracy skills in contexts related to personal identity, achieving personal goals, and understanding and interacting with the wider community. For example
  - use a map to locate position and describe the route to a familiar place [NS: M&S]
  - compare and contrast the value of items from two catalogues with regard to quantity, price, quality and additional costs [NS: N&A]
  - write a purchase list and calculate the cost to undertake a simple task [NS: N&A, S&P]
  - order and compare familiar and predictable sets of data and comment on the data in collaboration with others [NS: N&A, S&P]
  - use familiar timetables and fare information to compare different ways of making the same journey [NS: N&A]
  - compare and discuss changes and any trends in petrol prices over the past month [NS: S&P]
  - read and discuss data from simple charts or tables in a newspaper or on a website [NS: S&P]
  - compare and order the use-by dates (or best before dates) on a selection of packaged fresh produce [NS: M&S]
  - calculate the cost of two items and estimate change due after making a payment [NS: N&A].

### **Topic 2: Workplace and employment**

In Topic 2, students develop the numeracy skills selected by their teacher through activities that relate to preparing for and seeking employment, operating in an existing workplace, and/or entering a new work environment.

They use mathematics to deal with situations in the work environment that involve the use and application of a range of mathematical skills and knowledge.

### **Objectives**

- 1. Identify and interpret mathematical information in the context of workplace and employment.
- 2. Use and apply mathematical knowledge in the context of workplace and employment.
- 3. Communicate and represent mathematical knowledge in the context of workplace and employment.

### Subject matter

- Recall, use and communicate mathematical knowledge from the relevant selected numeracy skills within Number and algebra, Measurement and space, and/or Statistics and probability (see Additional subject-specific information section for a detailed list of the specific skills).
- Apply these selected numeracy skills in contexts related to workplace and employment. For example
  - work in groups to construct a simple chart/table and comment on information [NS: S&P]
  - follow simple instructions and measure materials in order to make a product [NS: M&S]
  - keep a record of casual hours of work and use a calculator to calculate gross pay expected [NS: N&A]
  - measure familiar and predictable quantities using simple and routine measuring instruments and units [NS: M&S]
  - record numbers or quantities of materials distributed or enter sales figures and data onto a spreadsheet, a familiar workplace computer or a hand-held device [NS: S&P]
  - identify and name common uses of shapes in a familiar environment [NS: M&S]
  - access and compare information contained in two-column tables [NS: S&P]
  - use a map to locate position and describe a regular delivery route [NS: M&S].

# Assessment

Students must complete two assessment tasks designed using the specifications and conditions provided below. One task must relate to Topic 1, and the other task must relate to Topic 2.

# Internal assessment option A: Project — Personal identity and community

Students complete a project in response to a scenario that assesses the numeracy skills studied in the context of Topic 1: Personal identity and community.

### **Assessment objectives**

- 1. Identify and interpret mathematical information in the context of personal identity and community.
- 2. Use and apply mathematical knowledge in the context of personal identity and community.
- 3. Communicate and represent mathematical knowledge in the personal identity and community.

### **Specifications**

This task requires students to:

- develop an item of communication
  - asking students to respond to a scenario related to personal identity and community
  - that provides students with authentic and/or real world opportunities to demonstrate their learning
  - with an outcome of either a physical product such as findings and/or a recommendation
- document the processes taken to develop the item of communication, including
  - identifying the mathematical information and knowledge relevant to the given scenario
  - selecting a procedure to follow
  - applying skills and processes to deliver an outcome
  - presenting findings and/or recommendations for the scenario.

It is recommended that this task is designed so that students can develop a response in approximately 10–15 hours of class time.

### Conditions

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

### **Response requirements**

One of the following:

- Multimodal (at least two modes delivered at the same time): up to 5 minutes, up to 6 A4 pages, or equivalent digital media
- Spoken: up to 4 minutes, or signed equivalent
- Written: up to 600 words.

### Instrument-specific standards (Internal assessment option A)

| Numeracy   | Grade |
|--|-------|
| The student response has the following characteristics:  |       |
| <ul> <li>Identification and interpretation of comprehensive mathematical information.</li> <li>Use and application of comprehensive mathematical knowledge.</li> <li>Communication and representation of comprehensive mathematical knowledge.</li> </ul>          | A     |
| <ul> <li>Identification and interpretation of thorough mathematical information.</li> <li>Appropriate use and application of thorough mathematical knowledge.</li> <li>Appropriate communication and representation of thorough mathematical knowledge.</li> </ul> | В     |
| <ul> <li>Identification and interpretation of mathematical information.</li> <li>Use and application of mathematical knowledge.</li> <li>Communication and representation of mathematical knowledge.</li> </ul>  | С     |
| <ul> <li>Identification and interpretation of partial mathematical information.</li> <li>Use and application of partial mathematical knowledge.</li> <li>Communication and representation of partial mathematical knowledge.</li> </ul>                            | D     |
| The student response does not match any of the descriptors above.  | E     |

# Internal assessment option B: Examination — Personal identity and community

Students respond to an examination that assesses the numeracy skills studied in the context of Topic 1: Personal identity and community.

### Assessment objectives

- 1. Identify and interpret mathematical information in the context of personal identity and community.
- 2. Use and apply mathematical knowledge in the context of personal identity and community.
- 3. Communicate and represent mathematical knowledge in the context of personal identity and community.

### **Specifications**

The teacher provides an examination that:

- · asks students to respond to a number of unseen short response real context questions
- · representatively samples subject matter from each of the topics
- may ask students to
  - respond using single words or sentences
  - interpret unseen stimulus
  - calculate using algorithms
  - draw or label graphs, tables or diagrams.
- contains simple familiar questions where
  - relationships and interactions are obvious and have few elements; and
  - all the information to work through the situation is identifiable; that is
    - the required procedure is clear from the way the simple familiar text is worded, or
    - in a context that has been a focus of prior learning.

### Conditions

- This is an individual supervised open-book task.
- The task may be in a hard copy or online format.
- The task may be delivered in two consecutive sessions only if
  - questions in each session are unseen
  - teaching or feedback is not provided between the sessions.
- Time allowed
  - Perusal time: 5 minutes
  - Working time: 45 minutes
- The teacher must provide the QCAA Numeracy Short Course formula book.
- Students
  - are required to use technology
  - can bring notes, exercise books or text books into the examination.

### Instrument-specific standards (Internal assessment option B)

| Numeracy   | Cut-off | Grade |
|--|---------|-------|
| The student response has the following characteristics:  |         |       |
| <ul> <li>Identification and interpretation of comprehensive mathematical information.</li> <li>Use and application of comprehensive mathematical knowledge.</li> <li>Communication and representation of comprehensive mathematical knowledge.</li> </ul>          | > 80%   | A     |
| <ul> <li>Identification and interpretation of thorough mathematical information.</li> <li>Appropriate use and application of thorough mathematical knowledge.</li> <li>Appropriate communication and representation of thorough mathematical knowledge.</li> </ul> | > 60%   | В     |
| <ul> <li>Identification and interpretation of mathematical information.</li> <li>Use and application of mathematical knowledge.</li> <li>Communication and representation of mathematical knowledge.</li> </ul>  | > 40%   | С     |
| <ul> <li>Identification and interpretation of partial mathematical information.</li> <li>Use and application of partial mathematical knowledge.</li> <li>Communication and representation of partial mathematical knowledge.</li> </ul>                            | > 20%   | D     |
| The student response does not match any of the descriptors above.  | ≥ 0%    | E     |

# Internal assessment option C: Project — Workplace and employment

Students complete a project in response to a scenario that assesses the numeracy skills studied in the context of Topic 2: Workplace and employment.

### Assessment objectives

- 1. Identify and interpret mathematical information in the context of workplace and employment.
- 2. Use and apply mathematical knowledge in the context of workplace and employment.
- 3. Communicate and represent mathematical knowledge in the context of workplace and employment.

### **Specifications**

This task requires students to:

- develop an item of communication
  - asking students to respond to a scenario related to workplace and employment
  - that provides students with authentic and/or real world opportunities to demonstrate their learning
  - with an outcome of either a physical product such as findings and/or a recommendation
- document the processes taken to develop the item of communication, including
  - identifying the mathematical information and knowledge relevant to the given scenario
  - selecting a procedure to follow
  - applying skills and processes to deliver an outcome
  - presenting findings and/or recommendations for the scenario.

It is recommended that this task is designed so that students can develop a response in approximately 10–15 hours of class time.

### Conditions

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

### **Response requirements**

One of the following:

- Multimodal (at least two modes delivered at the same time): up to 5 minutes, up to 6 A4 pages, or equivalent digital media
- Spoken: up to 4 minutes, or signed equivalent
- Written: up to 600 words

### Instrument-specific standards (Internal assessment option C)

| Numeracy   | Grade |
|--|-------|
| The student response has the following characteristics:  |       |
| <ul> <li>Identification and interpretation of comprehensive mathematical information.</li> <li>Use and application of comprehensive mathematical knowledge.</li> <li>Communication and representation of comprehensive mathematical knowledge.</li> </ul>          | A     |
| <ul> <li>Identification and interpretation of thorough mathematical information.</li> <li>Appropriate use and application of thorough mathematical knowledge.</li> <li>Appropriate communication and representation of thorough mathematical knowledge.</li> </ul> | В     |
| <ul> <li>Identification and interpretation of mathematical information.</li> <li>Use and application of mathematical knowledge.</li> <li>Communication and representation of mathematical knowledge.</li> </ul>  | С     |
| <ul> <li>Identification and interpretation of partial mathematical information.</li> <li>Use and application of partial mathematical knowledge.</li> <li>Communication and representation of partial mathematical knowledge.</li> </ul>                            | D     |
| The student response does not match any of the descriptors above.  | E     |

# Internal assessment option D: Examination — Workplace and employment

Students respond to an examination that assesses the numeracy skills studied in the context of Topic 2: Workplace and employment.

### Assessment objectives

- 1. Identify and interpret mathematical information in the context of workplace and employment.
- 2. Use and apply mathematical knowledge in the context of workplace and employment.
- 3. Communicate and represent mathematical knowledge in the context of workplace and employment.

### **Specifications**

The teacher provides an examination that:

- asks students to respond to a number of unseen short response real context questions
- · representatively samples subject matter from each of the topics
- may ask students to
  - respond using single words or sentences
  - interpret unseen stimulus
  - calculate using algorithms
  - draw or label graphs, tables or diagrams.
- contains simple familiar questions where
  - relationships and interactions are obvious and have few elements; and
  - all the information to work through the situation is identifiable; that is
    - the required procedure is clear from the way the simple familiar text is worded, or
    - in a context that has been a focus of prior learning.

### Conditions

- This is an individual supervised open-book task.
- The task may be in a hard copy or online format.
- The task may be delivered in two consecutive sessions only if
  - questions in each session are unseen
  - teaching or feedback is not provided between the sessions.
- Time allowed
  - Perusal time: 5 minutes
  - Working time: 45 minutes
- The teacher must provide the QCAA Numeracy Short Course formula book.
- Students
  - are required to use technology
  - can bring notes, exercise books or text books into the examination.

### Instrument-specific standards (Internal assessment option D)

| Numeracy   | Cut-off | Grade |
|--|---------|-------|
| The student response has the following characteristics:  |         |       |
| <ul> <li>Identification and interpretation of comprehensive mathematical information.</li> <li>Use and application of comprehensive mathematical knowledge.</li> <li>Communication and representation of comprehensive mathematical knowledge.</li> </ul>          | > 80%   | A     |
| <ul> <li>Identification and interpretation of thorough mathematical information.</li> <li>Appropriate use and application of thorough mathematical knowledge.</li> <li>Appropriate communication and representation of thorough mathematical knowledge.</li> </ul> | > 60%   | В     |
| <ul> <li>Identification and interpretation of mathematical information.</li> <li>Use and application of mathematical knowledge.</li> <li>Communication and representation of mathematical knowledge.</li> </ul>  | > 40%   | С     |
| <ul> <li>Identification and interpretation of partial mathematical information.</li> <li>Use and application of partial mathematical knowledge.</li> <li>Communication and representation of partial mathematical knowledge.</li> </ul>                            | > 20%   | D     |
| The student response does not match any of the descriptors above.  | ≥ 0%    | E     |

# Glossary

The syllabus glossary is available at www.qcaa.qld.edu.au/downloads/seniorqce/common/snr\_glossary\_cognitive\_verbs.pdf.

## References

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## **Version history**

| Version | Date of change | Information  |
|---------|----------------|--|
| 1.0     | July 2024      | Released for familiarisation and planning (with implementation starting in 2025) |
| 1.1     | October 2024   | ISBN removed   |