



Lifeskills Mathematics (National 4)

Draft National Course Specification



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Please refer to the note of changes at the end of this Course Specification for details of changes from previous version (where applicable).

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Course outline

Course title: Lifeskills Mathematics (National 4)

SCQF: level 4 (24 SCQF credit points)

Course code: to be advised

Mandatory Units

Lifeskills Mathematics: Personal Mathematics (National 4) **6 SCQF credit points**

Lifeskills Mathematics: Mathematics at Work (National 4) **6 SCQF credit points**

Numeracy (National 4) **6 SCQF credit points**

Added Value Unit

Lifeskills Mathematics (National 4) **6 SCQF credit points**

This Course includes six SCQF credit points for the assessment of added value in the Added Value Unit. Further information on this Unit is provided in the Assessment section.

Recommended entry

Entry to this Course is at the discretion of the centre. However, learners would normally be expected to have attained the skills and knowledge required by the following or by equivalent qualifications and/or experience:

- ◆ Mathematics (Access 3) Course or relevant component Units

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Course. Further information on relevant experiences and outcomes will be given in the *Course Support Notes*.

Progression

This Course or its components may provide progression to:

- ◆ Lifeskills Mathematics (National 5)
- ◆ further study, employment or training

Further details are provided in the Rationale section.

Equality and inclusion

This Course Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information please refer to the *Course Support Notes* and the *Course Assessment Specification*.

Rationale

All new and revised National Courses reflect Curriculum for Excellence values, purposes and principles. They offer flexibility, provide more time for learning, more focus on skills and applying learning, and scope for personalisation and choice.

In this Course, and its component Units, there will be an emphasis on skills development and the application of those skills. Assessment approaches will be proportionate, fit for purpose and will promote best practice, enabling learners to achieve the highest standards they can.

This Course provides learners with opportunities to continue to acquire and develop the attributes and capabilities of the four capacities as well as skills for learning, skills for life and skills for work.

All Courses provide opportunities for learners to develop breadth, challenge and application, but the focus and balance of the assessment will be appropriate for the subject area.

Relationship between the Course and Curriculum for Excellence values, purposes and principles

Mathematics is important in everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk, and make informed decisions.

Because mathematics is rich and stimulating, it engages and fascinates learners of all ages, interests and abilities. Learning mathematics develops logical reasoning, analysis, problem-solving skills, creativity, and the ability to think in abstract ways. It uses a universal language of numbers and symbols, which allows us to communicate ideas in a concise, unambiguous and rigorous way.

Mathematics equips us with many of the skills required for life, learning and work. Understanding the part that mathematics plays in almost all aspects of life is crucial. This reinforces the need for mathematics to play an integral part in lifelong learning, and be appreciated for the richness it brings.

This Course allows learners to acquire and develop the attributes and capabilities of the four capacities. For example: success in mathematical learning and activity leads to increased confidence as an individual in everyday situations; being numerically capable, especially in financial matters, helps towards becoming a responsible citizen; and being able to plan and organise will help in becoming an effective contributor.

Purpose and aims of the Course

The Course, which includes the freestanding Unit in Numeracy at SCQF level 4, will motivate and challenge learners by enabling them think through real-life situations and form a plan of action based on logic. The Course develops confidence in being able to handle information and tasks in both personal life and in the workplace. It uses mainly numerical data. The Course allows learners to make informed decisions based on data presented in a variety of forms.

This Course is designed to develop the learner's skills in mathematical reasoning relevant to learning, life and work in an engaging and enjoyable way. The Course will build on prior learning and develop:

- ◆ operational skills in finance, measurement and statistics, as well as algebraic skills relevant to patterns and formulae
- ◆ reasoning skills of investigation, problem solving and analysis
- ◆ numeracy skills in number processes and information handling

Information about typical learners who might do the Course

The Course would be suitable for all learners who have experienced breadth and depth of learning across the Third level Mathematics experiences and outcomes or who have attained Access 3 Mathematics or who have equivalent mathematical experience.

On successful completion of this Course, the learner could progress to:

- ◆ Lifeskills Mathematics (National 5)
- ◆ Numeracy at SCQF level 5 (freestanding Unit)
- ◆ National Certificate Group Awards
- ◆ employment

Mathematics has applications in many subject areas, and skills developed in this Course support progression in this and other curriculum areas. These skills can also support progression into Skills for Work Courses, National Progression Awards, National Certificate Group Awards, and employment.

Course structure and conditions of award

Course structure

This Course will develop skills for life and work, through context- and application-led learning. Through these contexts, learners will acquire and be able to apply operational skills directly relevant to life and work. In addition, learners will develop mathematical reasoning skills and will gain experience in making informed decisions. The Course includes the freestanding Unit in Numeracy at SCQF level 4.

Units are statements of standards for assessment and not programmes of learning and teaching. They can be delivered in a number of ways.

The Course has four Units, totalling 24 SCQF credit points.

Lifeskills Mathematics: Personal Mathematics (National 4)

This Unit will develop knowledge and skills, appropriate to this level, that focus on the use of mathematical ideas and strategies that can be applied to organising and planning personal life. Learners will develop reasoning skills to explore straightforward aspects of money management and also to work on measure and statistics in straightforward contexts.

Lifeskills Mathematics: Mathematics at Work (National 4)

This Unit will allow learners to explore mathematical ideas appropriate to this level, and their applications in the workplace and in our world. Learners will develop skills in extracting and analysing information in order to make informed decisions and logical plans. Learners will cover straightforward aspects of measurement and statistical work, as well as developing reasoning skills in context.

Numeracy (National 4)

This Unit will allow learners to develop numerical skills in number processes and information handling in order to solve problems and to make informed decisions. These skills will be developed in contexts including those of money, time and measurement.

Lifeskills Mathematics: Added Value Unit (National 4)

This Unit develops mathematical skills acquired from across the other three Units of the Course for use in unfamiliar applications. Learners will also be required to demonstrate breadth of learning across the Units. As an aid to meeting these aims, skills in using a calculator will be developed and a calculator will be permitted to be used in part of the assessment strategy.

Conditions of award

To achieve the Mathematics (National 4) Course, learners must pass all of the required Units, including the Added Value Unit. The required Units are shown in the Course outline section.

National 4 Courses are not graded.

Skills and knowledge

Full skills and knowledge for the Course will be given in the *Course Assessment Specification*. A broad overview of the mandatory subject skills, knowledge and understanding that will be assessed in the Course is given in this section.

This course will build on prior learning to develop straightforward:

Operational skills:

- ◆ financial — working with money and budgeting
- ◆ measurement — using instruments and formulae
- ◆ statistical — calculation of statistics, presenting information, assessing risk
- ◆ algebraic — working with patterns, using symbols in formulae

Numeracy skills:

- ◆ number processes — working with number and number operations to solve real-life problems in contexts including money, time and measurement
- ◆ information handling — making informed decisions based on data and ideas of chance and uncertainty in contexts including money, time and measurement

Reasoning skills:

- ◆ investigative — researching and extracting information
- ◆ problem solving — formulating an approach to reach a conclusion
- ◆ analytical — interpreting information and using logic

The added value of the Course is in developing these mathematical skills for use in unfamiliar applications. Learners will also be required to demonstrate breadth of learning from across the Units. As an aid to meeting these aims, skills in using a calculator will be developed.

Assessment

Information about assessment for the Course will be included in the *Course Assessment Specification*, which will provide full details including advice on how a learner's overall attainment for the Course will be determined.

Unit assessment

All Units are internally assessed against the requirements shown in the Unit Specification.

They can be assessed on a Unit-by-Unit basis or by combined assessment.

They will be assessed on a pass/fail basis within centres. SQA will provide rigorous external quality assurance, including external verification, to ensure assessment judgements are consistent and meet national standards.

The assessment of the Units in this Course will be as follows:

Mathematics: Personal Mathematics (National 4)

Learners who complete the Unit will be able to:

- ◆ use mathematical reasoning skills related to straightforward contexts in personal life
- ◆ use mathematical operational skills related to straightforward contexts in personal life

Mathematics: Mathematics at Work (National 4)

Learners who complete the Unit will be able to:

- ◆ use mathematical reasoning skills related to straightforward contexts in the workplace and in the wider world
- ◆ use mathematical operational skills related to straightforward contexts in the workplace and in the wider world

Numeracy (National 4)

Learners who complete the Unit will be able to:

- ◆ use numerical processes to solve given, straightforward real-life problems involving money, time and measurement
- ◆ interpret data and ideas of chance and uncertainty to solve given, straightforward real-life problems involving money, time and measurement

Added Value Unit

Courses from National 4 to Advanced Higher include assessment of [added value](#)¹. At National 4, added value will be assessed in an Added Value Unit. The Added Value Unit will address the key purposes and aims of the Course as defined in the Course Rationale. It will do this by addressing one or more of breadth, challenge or application.

¹ Definitions can be found here: www.sqa.org.uk/sqa/45528.html

In this Course, the Added Value Unit will focus on breadth and application.

The learner will draw on and extend the skills they have learned during the Course. This will be assessed through a [test](#)², which will offer opportunities to demonstrate the breadth of knowledge and skills acquired from across the other Units in unfamiliar applications. As an aid to meeting these aims, skills in using a calculator will be developed and a calculator will be permitted to be used in part of the assessment strategy.

Exemplification of possible assessment approaches for Units will be provided in the *National Assessment Resource*.

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² Definitions can be found here: www.sqa.org.uk/sqa/45528.html

Development of skills for learning, skills for life and skills for work

(Note: The information given below reflects the initial thinking on significant opportunities for development of skills for learning, skills for life and skills for work. These may be subject to change as the development process progresses.)

It is expected that learners will also develop broad, generic skills through this Course. The skills that are likely to be appropriate for this Course are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Course where there are appropriate opportunities.

2 Numeracy

- 2.1 Number processes
- 2.2 Money, time and measurement
- 2.3 Information handling

5 Thinking skills

- 5.3 Applying
- 5.4 Analysing and evaluating

Amplification of these skills is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work*. The level of these skills will be appropriate to the level of the Course. Further information on building in skills for learning, skills for life and skills for work for the Course is given in the *Course Support Notes*.

Administrative information

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Superclass: to be advised

History of changes to National Course Specification

Course details	Version	Description of change	Authorised by	Date

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