



## **Lifeskills Mathematics (National 5)**

---

### **Draft National Course Specification**

---



**Valid from August 2013**

This edition: April 2011, draft version 1.0

This specification may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged. Additional copies of this Course Specification can be downloaded from SQA's website: [www.sqa.org.uk](http://www.sqa.org.uk).

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

# Contents

<b>Course outline</b>	<b>1</b>
Mandatory Units	1
Recommended entry	1
Progression	2
Equality and inclusion	2
<b>Rationale</b>	<b>3</b>
Relationship between the Course and Curriculum for Excellence values, purposes and principles	3
Purpose and aims of the Course	4
Information about typical learners who might do the Course	4
<b>Course structure and conditions of award</b>	<b>5</b>
Course structure	5
Conditions of award	5
<b>Skills and knowledge</b>	<b>6</b>
<b>Assessment</b>	<b>7</b>
Unit assessment	7
Course assessment	8
<b>Development of skills for learning, skills for life and skills for work</b>	<b>9</b>
<b>Administrative information</b>	<b>10</b>

## Course outline

**Course title:** Lifeskills Mathematics (National 5)

**SCQF:** level 5 (24 SCQF credit points)

**Course code:** to be advised

### Mandatory Units

**Lifeskills Mathematics: Personal Mathematics (National 5)** **6 SCQF credit points**

**Lifeskills Mathematics: Mathematics at Work (National 5)** **6 SCQF credit points**

**Numeracy (National 5)** **6 SCQF credit points**

**Course assessment** **6 SCQF credit points**

This Course includes six SCQF credit points for 40 additional programmed hours to allow preparation for Course assessment. The Course assessment covers the added value of the Course. Further information on the Course assessment 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:

- ◆ Lifeskills Mathematics (National 4) 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:

- ◆ other SQA qualifications in Mathematics or related areas
- ◆ 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 5, 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, and to explore mathematical ideas.

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 will 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**

This would be a suitable Course for all learners who have experienced breadth and depth of learning across Fourth level Mathematics experiences and outcomes, or who have attained National 4 Mathematics or National 4 Lifeskills Mathematics, or who have an equivalent mathematical qualification. It would be suitable for learners who can respond to a level of challenge, and who can apply what they have learned in new and unfamiliar situations.

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 and extend 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, and to appreciate the role of mathematical ideas in the world. In addition, learners will develop mathematical reasoning skills. They will learn how to make informed decisions and evaluations. The Course includes the freestanding Unit in Numeracy at SCQF level 5.

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

In addition to the Course assessment, the Course includes three mandatory Units.

#### **Lifeskills Mathematics: Personal Mathematics (National 5)**

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 money management and also to work on measure and statistics in context.

#### **Lifeskills Mathematics: Mathematics at Work (National 5)**

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. They will cover aspects of measurement and statistical work, as well as developing reasoning skills in context.

#### **Numeracy (National 5)**

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.

### **Conditions of award**

To gain the award of the Course, the learner must pass all the Units as well as the Course assessment. The required Units are shown in the Course outline section. Course assessment will provide the basis for grading attainment in the Course award.

## 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:

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, using logic and providing justification

The added value of the Course is in developing these mathematical skills for use in more challenging and in unfamiliar situations. 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 and a calculator will be permitted to be used in part of the assessment strategy.

## 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 judgments are consistent and meet national standards.

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

#### **Mathematics: Personal Mathematics (National 5)**

Learners who complete the Unit will be able to:

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

#### **Mathematics: Mathematics at Work (National 5)**

Learners who complete the Unit will be able to:

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

#### **Numeracy (National 5)**

Learners who complete the Unit will be able to:

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

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

## **Course assessment**

Courses from National 4 to Advanced Higher include assessment of [added value](#)<sup>1</sup>. At National 5, Higher and Advanced Higher, the added value will be assessed in the Course assessment. The added value for the Course must 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.

In this Course, added value will focus on breadth, challenge and application.

Learners will draw on and extend the skills they have learned during the Course. This will be assessed within a [question paper](#)<sup>2</sup>, requiring application of the breadth of knowledge and skills acquired from across the Units in more challenging and in unfamiliar situations. 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.

---

<sup>1</sup> Definitions can be found here: [www.sqa.org.uk/sqa/45528.html](http://www.sqa.org.uk/sqa/45528.html)

<sup>2</sup> See link above for definition.

## 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

---

**Published:** April 2011 (version 1.0)

**Superclass:** to be advised

---

## History of changes to National Course Specification

Course details	Version	Description of change	Authorised by	Date

© Scottish Qualifications Authority 2011

This specification may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged. Additional copies of this Unit can be downloaded from SQA's website at [www.sqa.org.uk](http://www.sqa.org.uk).

Note: You are advised to check SQA's website ([www.sqa.org.uk](http://www.sqa.org.uk)) to ensure you are using the most up-to-date version of the Course Specification.