
Lifeskills Mathematics, Mathematics, Mathematics of Mechanics and Statistics



This update contains information on any recent updates to documents for your subjects along with further information and guidance.

I hope you find this information helpful, and please contact me if you have any questions.

Martin Brown
Qualifications Manager

The Qualifications Team

Martin Brown
Qualifications Manager

Hilary Cuthbertson
Qualifications Officer

Lynn McKinlay
Qualifications Officer

Michael Atkinson
Subject Implementation Manager

Subject Review Report

The development and implementation of the whole suite of National Qualifications has been a huge programme of work dating from 2010 and included many stakeholders. As part of the review and evaluation of this programme, SQA has been engaging with teachers and lecturers on an ongoing basis, as well as gathering intelligence from the awarding and verification process. As a result of this work, SQA has created subject reports to give teachers and lecturers an insight into our planned incremental changes and further areas of investigation for each subject. Each report identifies the key issues for that subject and an associated action plan. Find out more information and what this means for you subject here:

- [Lifeskills Mathematics](#)
- [Mathematics](#)
- [Mathematics of Mechanics](#)
- [Statistics](#)

Planned changes to documents in session 2016/17

We have put in place an agreed schedule of planned changes to documents for session 2016/17.

Publication date	Documents
End of April 2016	Course Specifications, Course Assessment Specifications and Unit Specifications
End of May 2016	Course and Unit Support Notes
End of August 2016	Unit assessment support packs
End of September 2016	Coursework assessment tasks, specimen question papers and exemplar question papers

This schedule takes into account any necessary changes that are identified as a result of verification activities, the exam diet and feedback received from centres throughout the current session. It is anticipated that additional, critical changes may be identified for some subjects following the grade boundary meetings which take place during the summer months. Where such changes are identified, we will make further updates and publish these documents by the following dates:

Publication date	Documents
End of August 2016	Course Specifications, Course Assessment Specifications and Unit Specifications (<i>further critical changes only</i>)
End of September 2016	Course and Unit Support Notes (<i>further critical changes only</i>)

Changes to documents in April and May 2016

Please ensure that you read the following updated documents in preparation for session 2016/17. To help you quickly and easily identify what has been updated, for every updated mandatory document we have also published a comparison document that clearly illustrates the changes.

These are published alongside the updated documents on our subject pages at www.sqa.org.uk/nqsubjects

The Notification of Changes spreadsheets have also been updated to reflect the latest changes to documents. You can view these spreadsheets at www.sqa.org.uk/nqsubjectchanges

National 5 documents

National 5 Lifeskills Mathematics Course Assessment Specification

A reference to the Question Paper Brief has been added to the 'Structure and coverage of Course assessment' section.

National 5 Mathematics Course Assessment Specification

Further information and clarification on the scope and structure of the question papers has been added to the 'Structure and coverage of Course assessment' section: a reference to the Question Paper Brief has been included; items have been split into the same sub-skills which are found in the Unit Specifications and Course and Unit Support Notes (there is no change to the content).

National 5 Mathematics Course and Unit Support Notes

Appendix 1:

- Relationships Assessment Standard 1.3 split into the three sub-skills from the Unit Specification
 - Applications Assessment Standard 1.2 split into the four sub-skills from the Unit Specification
 - Applications Assessment Standard 1.3 split into the three sub-skills from the Unit Specification
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Higher documents

Higher Mathematics Course Assessment Specification

A reference to the Question Paper Brief has been added to the 'Structure and coverage of Course assessment' section.

The 'Further mandatory information on Course coverage' section has been amended as follows:

- Algebraic and trigonometric skills section: 'Identifying or sketching a function' changed to Identifying a function from a graph, or sketching a function'
- Geometric skills section: 'Using unit vectors \mathbf{i} , \mathbf{j} , \mathbf{k} as a basis' changed to 'Using and finding unit vectors including \mathbf{i} , \mathbf{j} , \mathbf{k} as a basis'; 'angle between 2 vectors' changed to 'angle between two vectors'
- Calculus skills section: 'Determine the greatest/least values of a function on a closed interval' added to match the Course and Unit Support Notes; ' n not equal to -1 ' changed to ' $n \neq -1$ '

'Additional information' section: 'W' changed to blackboard font in line with other sets.

Higher Mathematics Course and Unit Support Notes

For consistency with the changes to the Course Assessment Specification, minor amendments have been made to Appendix 1: Content and learning and teaching notes:

- 'Identifying or sketching a function' changed to Identifying a function from a graph, or sketching a function'
- 'Using unit vectors \mathbf{i} , \mathbf{j} , \mathbf{k} as a basis' changed to 'Using and finding unit vectors including \mathbf{i} , \mathbf{j} , \mathbf{k} as a basis'
- 'angle between 2 vectors' changed to 'angle between two vectors'
- ' n not equal to -1 ' changed to ' $n \neq -1$ '
- 'W' changed to blackboard font in line with other sets.

Advanced Higher documents

Advanced Higher Mathematics Course Assessment Specification

A reference to the Question Paper Brief has been added to the 'Structure and coverage of Course assessment' section.

The 'Further mandatory information on Course coverage' section has been clarified as follows:

- symbols for standard sets and for matrices standardised
 - minor amendments to wording relating to the second sub-skill for Assessment Standard 1.1 of the Applications in Algebra and Calculus Unit and Assessment Standard 1.3 of the Geometry, Proof and Systems of Equations Unit
 - wording relating to formulae sheet amended
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Advanced Higher Mathematics Course and Unit Support Notes

For consistency with the changes to the Course Assessment Specification, minor amendments have been made to 'Further information on Course/Units' section:

- symbols for standard sets and for matrices standardised

Advanced Higher Mathematics of Mechanics Course Assessment Specification

A reference to the Question Paper Brief has been added to the 'Structure and coverage of Course assessment' section.

The 'Further mandatory information on Course coverage' section has been clarified as follows:

- the first and second sub-skills from Assessment Standard 1.4 from Force, Energy and Periodic Motion have been amended by adding 'Consider the forces on a body or a rod on the point of tipping or turning', and changing 'centre of gravity' to 'centre of mass' and adding the word 'using' to the final sentence
- the second sub-skill from Assessment Standard 1.3 from Linear and Parabolic Motion has been amended by merging two statements
- the third sub-skill from Assessment Standard 1.4 from Linear and Parabolic Motion has been amended by adding 'where acceleration may be considered as a function of time or of displacement'

Advanced Higher Mathematics of Mechanics Course and Unit Support Notes

For consistency with the changes to the Course Assessment Specification, the same amendments have been made to the 'Further information on Course/Units' section:

- the first and second sub-skills from Assessment Standard 1.4 from Force, Energy and Periodic Motion have been amended by adding 'Consider the forces on a body or a rod on the point of tipping or turning', and changing 'centre of gravity' to 'centre of mass' and adding the word 'using' to the final sentence
- the second sub-skill from Assessment Standard 1.3 from Linear and Parabolic Motion has been amended by merging two statements
- the third sub-skill from Assessment Standard 1.4 from Linear and Parabolic Motion has been amended by adding 'where acceleration may be considered as a function of time or of displacement'

Advanced Higher Statistics Course Assessment Specification

A reference to the Question Paper Brief has been added to the 'Structure and coverage of Course assessment' section and the reference to 'short case studies' has been removed.

The 'Further mandatory information on Course coverage' section has been clarified as follows:

- The second sub-skill for Assessment Standard 1.4 from Data Analysis and Modelling has been amended to remove the phrase 'and normal'.
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- The second sub-skill for Assessment Standard 1.1 from Statistical Inference has been amended by adding reference to the standard error.
 - The second sub-skill for Assessment Standard 1.3 from Statistical Inference has been amended to change ‘measuring the strength of’ to ‘assessing’.

Advanced Higher Statistics Course and Unit Support Notes

For consistency with the changes to the Course Assessment Specification, the same amendments have been made to the ‘Further information on Course/Units’ section:

- The second sub-skill for Assessment Standard 1.4 from Data Analysis and Modelling has been amended to remove the phrase ‘and normal’.
- The second sub-skill for Assessment Standard 1.1 from Statistical Inference has been amended by adding reference to the standard error.
- The second sub-skill for Assessment Standard 1.3 from Statistical Inference has been amended to change ‘measuring the strength of’ to ‘assessing’.

Advanced Higher Statistics Unit Specifications

Statistical Inference:

- Assessment Standard 1.2 amended from ‘Applying skills to sampling and the central limit theory’ to ‘Applying skills to sampling and the central limit theorem’.

Data Analysis and Modelling:

- The phrase ‘data collection’ has been removed from the Unit outline.

Further information and guidance

Higher Statistics Award

A second Unit-by-Unit assessment support pack is currently being written which will be suitable for re-assessment. This will be published in August.

Verification Key Messages

Key messages from round 1 of verification in session 2015/16 are available from the relevant subject pages of our website at www.sqa.org.uk/nqsubjects. You can access them from the ‘Verification and Course Reports’ heading in the Assessment Support section.

Key messages from round 2 will be published over the summer.

Understanding Standards programme

Our Understanding Standards programme will continue in session 2016/17 when we will publish more candidate evidence and commentary materials. We will also deliver a series of Understanding Standards events on Course assessment and continue to deliver subject-specific continuing professional development (CPD) webinars online, subject to request. In

addition to this, throughout the session we will gather and publish assessment case studies to share good practice in assessment.

Understanding Standards events will take place on the following dates:

National 5 Lifeskills Mathematics

- 9 November — Aberdeen
- 10 November — Inverness
- 17 November — Glasgow
- 5 December — Edinburgh

National 5/Higher Mathematics

- 14 November — Aberdeen
- 15 November — Inverness
- 22 November — Glasgow
- 7 December — Edinburgh

Advanced Higher Mathematics

- 7 November — Inverness
- 8 November — Aberdeen
- 18 November — Glasgow
- 6 December — Edinburgh

Advanced Higher Mathematics of Mechanics

- 24 November — Glasgow

Advanced Higher Statistics

- 28 November — Glasgow

A Nominee training event for Mathematics will take place on the following date:

- 20 September

To access candidate evidence and commentaries for externally assessed Components of Course assessment, visit www.understandingstandards.org.uk

Candidate evidence and commentaries for Units and internally assessed Components of Course assessment are available from our secure website.

For more information on Understanding Standards, visit www.sqa.org.uk/understandingstandards

Looking ahead to session 2016/17

Continuing Professional Development (CPD) training

We are still offering free CPD training for teachers and lecturers, where particular areas of concern are identified which are not addressed by the Understanding Standards programme. This CPD support is subject-specific and is tailored to cover one or more qualification levels according to requirements.

Where there is sufficient demand, we may deliver CPD training through online webinars and, where appropriate, publish the recordings and related materials on our website after the webinar has taken place.

Stay informed

Subscribe to our newsletters

We currently issue two key newsletters for teachers and lecturers:

- Centre News (weekly)
- New National Qualifications update (monthly)

Both of these newsletters contain the latest news and updates for the National Qualifications. Centre News also includes subject-specific news and a regular reminder of key dates during the session.

To subscribe to our newsletters, visit <http://mailer.sqa.org.uk>

Visit your subject pages

Make sure you regularly visit your subject pages, where you can access documents and assessment support materials for your Courses, Verification Key Messages and information on Coursework. You will also find the latest news updates for your Courses in the 'Updates and announcements' section.

Visit www.sqa.org.uk/nqsubjects

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YouTube: [SQAonline](https://www.youtube.com/SQAonline)

Contact us

For centre enquiries, please contact our Customer Support Team:

Tel: 0303 333 0330

Fax: 0345 213 5000

E-mail: mycentre@sqa.org.uk
