

Scottish Group Award Specifications

SGA in:	Land and Environment		
Level:	Intermediate 2	Code:	G5AR 11

Summary of requirements

SGA in Land and Environment at Intermediate 2

National Courses and Units required*

2 National Courses (8 credits) at Intermediate 2 from:

Amenity Horticulture
Biology
Crop Establishment
Fish Husbandry
Forest Industry
Forestry Practice
Investigating Fish Rearing Systems
Investigating the Natural Environment
Livestock Production
Managing Environmental Resources
Plant Propagation

Details in specific section

plus

1 mandatory National Unit (1 credit):

Sustainable Development in Practice (Int 2)

Details in open section

plus

7 credits at minimum of Intermediate 1

Details in open section

Total 16 credits

Core Skills required*

The above must include or cover:

5 core skills at Intermediate 1

Details in specific section

*See Important Note on page 4.

Rules for credit contribution for specific and open sections

Important Note* Achievement above the minimum requirements

The specification shows the **minimum** requirements for this SGA. Where possible, centres may wish to encourage candidates to exceed this minimum. Candidates achieving above the minimum specification will have this achievement recorded on their Scottish Qualifications Certificate. For example the following can be achieved above the minimum requirement:

- Core Skills at levels above those specified
- more National Courses and Units at Intermediate 2 instead of the credits at Intermediate 1
- National Course grades, eg grade A or B instead of grade C
- more than the required two National Courses, in which case each additional course completed counts as four credits in the open section of the specification

Hierarchies

- courses and units can be substituted by those with the same title at a higher level, eg Natural Resource Use (Int 2) can be substituted by Natural Resource Use (H) (See Section E)

Double counting

- courses and units with the same title at different levels cannot both contribute credits to the SGA, eg **either** Natural Resource Use (Int 2) **or** Natural Resource Use (H)
- courses at the same level in the same subject cannot both contribute credits to the SGA, eg **either** the National Course in Biology at Intermediate 2 **or** Standard Grade Biology at Credit Level (See Section F)
- same course with different grades cannot both contribute credits to the SGA, eg **either** Managing Environmental Resources (Int 2) at grade A **or** Accounting and Finance (Int 2) at grade C
- same course or unit cannot contribute credit to both the specific and open sections of an SGA

Specific section

A

This section specifies: mandatory courses, mandatory units, mandatory combinations of courses and/or units, mandatory core skill requirements and optional courses and units.

Course/unit no	Course/unit title	Credits
Two National Courses from:		
C02P 11	Amenity Horticulture (Int 2)	4
C007 11	Biology (Int 2)	4
C02R 11	Crop Establishment (Int 2)	4
C02S 11	Fish Husbandry (Int 2)	4
C02T 11	Forest Industry (Int 2)	4
C02V 11	Forestry Practice (Int 2)	4
C02W 11	Investigating Fish Rearing Systems (Int 2)	4
C02X 11	Investigating the Natural Environment (Int 2)	4
C02Y 11	Livestock Production (Int 2)	4
C055 11	Managing Environmental Resources (Int 2)	4
C03A 11	Plant Propagation (Int 2)	4
plus one mandatory National Unit:		
D896 11	Sustainable Development in Practice (Int 2)	1

Total credits required: 9

** Core skills requirement

Communication at Intermediate 1
Numeracy at Intermediate 1
Information Technology at Intermediate 1
Problem Solving at Intermediate 1
Working with Others at Intermediate 1

** See Section D for core skills details.

Note: Candidates may substitute designated Standard Grades at Credit Level for National Courses at Intermediate 2 in this section. (See Section F)

Open section

B

7 credits at minimum of Intermediate 1 are required to complete this SGA. These can be chosen from either one or both of the following sections:

- Open section (any qualification listed below)
- Specific section (units and courses not already chosen)

The 7 credits may be made up from any of the following. Each has a fixed credit value for the purposes of this SGA.

Qualifications	Credit
National Units at Intermediate 1 or above	each typically 1
National Courses at Intermediate 1 or above	each 4
Standard Grades at General Level contribute credits at <i>Intermediate 1</i> *	each 4
Standard Grades at Credit Level contribute credits at <i>Intermediate 2</i> *	each 4
Free-standing core skills units (if required to complete the core skills requirement)	each 1
Relevant SVQs at Level 1 in the following occupational area contribute credits at <i>Intermediate 1</i> : 001 (Tending Animals, Plants and Land)	max 7
Relevant SVQs at Level 2 in the following occupational area contribute credits at <i>Intermediate 2</i> : 001 (Tending Animals, Plants and Land)	max 7

*If achieved prior to 1994 please contact SQA Helpdesk ☎ 0141 242 2214.

Note: There are many ways in which the 7 credits at Intermediate 1 can be achieved and the following sections are provided for your information.

Open section: Qualifications which can contribute credits to this group award.

Programme advice: Guidance on possible combinations of units and courses which candidates might choose in order to gain the required credits.

Centres and candidates should agree the most appropriate way of gaining the required credits to meet each candidate's individual needs.

Rules for credit contribution for specific and open sections

Important Note* Achievement above the minimum requirements

The specification shows the **minimum** requirements for this SGA. Where possible, centres may wish to encourage candidates to exceed this minimum. Candidates achieving above the minimum specification will have this achievement recorded on their Scottish Qualifications Certificate. For example the following can be achieved above the minimum requirement:

- Core Skills at levels above those specified
- more National Courses and Units at Intermediate 2 instead of the credits at Intermediate 1
- National Course grades, eg grade A or B instead of grade C
- more than the required two National Courses, in which case each additional course completed counts as four credits in the open section of the specification

Hierarchies

- courses and units can be substituted by those with the same title at a higher level, eg Natural Resource Use (Int 2) can be substituted by Natural Resource Use (H) (See Section E)

Double counting

- courses and units with the same title at different levels cannot both contribute credits to the SGA, eg **either** Natural Resource Use (Int 2) **or** Natural Resource Use (H)
- courses at the same level in the same subject cannot both contribute credits to the SGA, eg **either** the National Course in Biology at Intermediate 2 **or** Standard Grade Biology at Credit Level (See Section F)
- same course with different grades cannot both contribute credits to the SGA, eg **either** Managing Environmental Resources (Int 2) at grade A **or** Accounting and Finance (Int 2) at grade C
- same course or unit cannot contribute credit to both the specific and open sections of an SGA

Note: Advice on making up programmes of credit from the open section follows in Section C.

Candidates having met the requirements of the specific section need to achieve a further 7 credits at a minimum of Intermediate 1. The general rules are defined in Section B.

A wide choice is available to meet the 7 credits. Centres should consider individual candidate needs, eg for further specialist work within the title area of the SGA or for broadening beyond the SGA title area.

Advice has been developed in the following section on possible groupings of units and courses. This might be useful in the selection of programmes to meet individual candidates' career and progression needs in land and environment. The groupings are not exhaustive. Centres and candidates can choose other provision from SQA's range of qualifications to build up a coherent programme.

Candidates can make up the 7 credits by selecting courses and/or units from a range of these groupings or by selecting courses and/or units from an individual grouping according to their needs.

Please note the rules on hierarchical substitution and double-counting listed in Section B when finalising individual candidate SGA programmes.

*Mandatory unit of a course. †Optional unit of a course. All other units are free-standing National Units. []Bracketed numbers indicate the former coding for these unrevised National Units.

Course/unit no	Course/unit title	Credits
Agriculture		
Free-standing National Units:		
D0P2 11	Anatomy and Physiology of Animals (Int 2) [1180140]	1
D840 11	Crop Establishment Equipment (Int 2)	1
E9JB 11	Livestock Wastes and Effluents (Int 2) [1180620]	0.5
D898 11	The Land-based Industries (Int 2)	1
D0JM 11	Tillage (Int 2) [68070]	0.5
D909 11	Water Supplies and Drains (Int 2)	1
D0LS 10	Introduction to Crops and Soils (Int 1) [78003]	0.5
D0PH 10	Introduction to the Welfare of Livestock on Farms (Int 1) [1182802]	0.5
D878 10	Plant Husbandry – Common Disorders (Int 1)	0.5
Aquaculture		
Free-standing National Units:		
D853 11	Fish Farming – Salmonid Ova Production (Int 2)	1
D361 11	The Sea as a Resource (Int 2)	1
D850 10	Fish Farming – Introduction to Aquaculture (Int 1)	1

Course/unit no	Course/unit title	Credits
Business Management		
Course:		
C010 10	Business Management (Int 1)	4
Component units of course:		
D047 10	*Business Activities (Int 1)	1
D046 10	*Business in Society (Int 1)	1
D048 10	*Information in Business (Int 1)	1
Computing		
Course:		
C017 11	Computing (Int 2)	4
Component units of course:		
D093 11	*Computer Systems (Int 2)	1
D098 11	*Computing Project (Int 2)	1
D095 11	*Software Development (Int 2)	1
Environment		
Course:		
C055 10	Managing Environmental Resources (Int 1)	4
Component units of course:		
D310 10	*Ecosystems (Int 1)	1
D309 10	*Environmental Issues (Int 1)	1
D311 10	*Land Use (Int 1)	1
Free-standing National Units:		
D837 11	Biodiversity in Scotland (Int 2)	1
D839 11	Countryside Recreation (Int 2)	1
D842 11	Field Archaeology (Int 2)	1
D905 10	Trees in the Environment (Int 1)	1
Forestry		
Free-standing National Units:		
D875 11	Measurement of Timber Produce (Int 2)	1
D866 10	Forestry in Britain: An Introduction (Int 1)	1
D903 10	Tree and Shrub Planting (Int 1)	1
D869 10	Tree Identification: An Introduction (Int 1)	1
Gamekeeping		
Free-standing National Units:		
D0NV 11	Predator and Pest Control (Int 2) [1120011]	1
D0M3 11	Quarry Species (Int 2) [78427]	1
D0NR 10	Introduction to Gamekeeping (Int 1) [1120001]	1
D0NW 10	Wildlife Habitats of Game (Int 1) [1120051]	0.5

Course/unit no	Course/unit title	Credits
Health and Safety		
Free-standing National Unit:		
D11M 12	*Health and Safety in the Work Environment (H) [7160026]	1
Horticulture		
Free-standing National Units:		
D864 11	Home and Allotment Gardening (Int 2)	1
D0K1 11	Landscape Construction: Introduction (Int 2) [68240]	0.5
D876 11	Nursery Stock Production (Int 2)	1
D883 11	Plant Structure and Function (Int 2)	1
D0LY 11	Protected Environment: Sites and Structures (Int 2) [78151]	1
D0JX 11	Rooting, Seed and Potting Composts (Int 2) [68191]	0.5
D0M2 11	Vegetable Production (Int 2) [78207]	1
D865 10	Bedding Plant Production: An Introduction (Int 1)	1
D0PV 10	Introduction to Soft Landscaping (Int 1) [1240006]	0.5
Science		
Course:		
C008 11	Biotechnology (Int 2)	4
Component units of course:		
D040 11	*Biotechnology Processes (Int 2)	1
D038 11	*The Biology of Microorganisms (Int 2)	1
D039 11	*Working with Microorganisms (Int 2)	1
Course:		
C007 10	Biology (Int 1)	4
Component units of course:		
D024 10	*Biotechnological Industries (Int 1)	1
D025 10	*Growing Plants (Int 1)	1
D023 10	*Health and Technology (Int 1)	1
Course:		
C012 10	Chemistry (Int 1)	4
Component units of course:		
D065 10	*Chemistry and Life (Int 1)	1
D063 10	*Chemistry in Action (Int 1)	1
D064 10	*Everyday Chemistry (Int 1)	1
Course:		
C043 10	Geology (Int 1)	4
Component units of course:		
D244 10	*Geology and Scenery (Int 1)	1
D245 10	*Geology, People and Environment (Int 1)	1
D243 10	*The Study of the Earth (Int 1)	1

Course/unit no	Course/unit title	Credits
Free-standing National Units:		
D0RF 11	Science and Technology in Society (Int 2) [3161312]	1
D0RD 11	Science in Context 1 (Int 2) [3161101]	1
Support in a Veterinary Practice		
Free-standing National Units:		
D0NX 11	Veterinary Care Auxiliary: Anatomy and Physiology of Companion Animals (Int 2) [1180028]	2
D0NY 11	Veterinary Care Auxiliary: First Aid for Companion Animals (Int 2) [1180048]	1
D0P0 11	Veterinary Care Auxiliary: General Care of Companion Animals (Int 2) [1180058]	1.5
D0P1 11	Veterinary Care Auxiliary: In-Patient Care and Hospital Management (Int 2) [1180078]	1
D0P3 11	Veterinary Care Auxiliary: Receptionist Duties and Practice Organisation (Int 2) [1180158]	0.5
D0P4 11	Veterinary Care Auxiliary: Reproduction and Neonatal Care in Companion Animals (Int 2) [1180178]	1
D0P5 11	Veterinary Care Auxiliary: Veterinary Terminology (Int 2) [1180198]	1.5
Tractor Operations		
Free-standing National Units:		
D901 11	Tractor Operations 2 (Int 2)	1
D900 10	Tractor Operations 1 (Int 1)	1
Travel and Tourism		
Component units of Travel and Tourism course:		
D438 11	*Travel and Tourism: An Introduction (Int 2)	2
D439 11	†British Isles Tourist Destinations (Int 2)	1
D441 11	†Interacting with Customers (Int 2)	1
Work Experience		
Free-standing National Unit:		
D01M 11	Work Experience (Int 2)	1
Core Skills		
Free-standing National Units:		
D01B 10	Communication (Int 1)	1
D01D 10	Information Technology (Int 1)	1
D01C 10	Numeracy (Int 1)	1
D01E 10	Problem Solving (Int 1)	1
D01F 10	Working with Others (Int 1)	1

Candidates who have not achieved these core skills in other ways must select the required core skills units. See Section D for further information.

One or more core skills in this SGA may be automatically certificated through courses and units in the specific section. Where this is the case, the corresponding core skill unit in the open section cannot be counted towards the SGA.

Core skills

D

To achieve this SGA, all candidates **must achieve** the following core skills:

Core skill	Level
Communication	Intermediate 1
Numeracy	Intermediate 1
Information Technology	Intermediate 1
Problem Solving	Intermediate 1
Working with Others	Intermediate 1

Candidates can achieve core skills:

- through Standard Grades or other units which give automatic certification of core skills, eg a candidate who has completed Standard Grade English and Mathematics at General Level is given automatic certification of Communication and Numeracy at Intermediate 1
- by selecting from the group award units and courses which give automatic certification of core skills, eg the unit Work Experience at Intermediate 2 gives automatic certification of Problem Solving and Working with Others at Intermediate 2
- by selecting dedicated core skills units in the open section of the SGA

Candidates' current level of achievement in core skills is shown on the Scottish Qualifications Certificate in the form of a profile. This shows achievement against each of the core skills *components*. Where a core skill has more than one component, the candidate needs to achieve each component at the level specified for the SGA. For example, if an SGA requires Numeracy at Intermediate 1, a candidate whose profile shows Using Number at Intermediate 1 and Using Graphical Information at Access 3 would not meet the requirement and would have to improve in Using Graphical Information.

Details of all courses which give automatic certification of core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

Hierarchical sequences

E

The SQA numbering system for qualifications consists of a 4 + 2 reference code.

The qualifications in a hierarchical sequence have the same title and are available at more than one level. They are identified by their reference code having the same first four digits, eg, D093 in the example below. The last two digits are unique to each level of qualification, eg 12 equates to Higher, 11 equates to Intermediate 2.

Units

The following is an example of a hierarchical sequence of units:

D093 10	Computer Systems (Int 1)
D093 11	Computer Systems (Int 2)
D093 12	Computer Systems (H)
D093 13	Computer Systems (AH)

Where units which are part of hierarchical sequences are specified, candidates who achieve a unit at a higher level than the one specified can use the upper level unit to count as credit towards the group award. For example, Computer Systems (H) can be counted instead of Computer Systems (Int 2).

Candidates can only use one of these units to count as credit towards the group award.

In the case of unrevised National Certificate Modules, ie units which retain their original number, there are hierarchies where the title is the same and the number is different. Details of these exceptions will be published in a separate document. The pattern for these hierarchies is the same as that previously established for GSVQs.

There are also some hierarchies where the titles and numbers of the units at different levels are different. In this specification, if there are two units at different levels with heavily overlapping content, only one of these units should be used to count as credit towards the group award. Details of these exceptions will be published in a separate document.

Courses

The following is an example of a hierarchical sequence of courses:

C055 10	Managing Environmental Resources (Int 1)
C055 11	Managing Environmental Resources (Int 2)
C055 12	Managing Environmental Resources (H)
C055 13	Managing Environmental Resources (AH)

In the SGA specification, where courses which belong to hierarchical sequences are specified, candidates who achieve a course at a higher level than the one specified can use the upper level course to count as credit towards the group award. For example, Managing Environmental Resources (H) can be counted instead of Managing Environmental Resources (Int 2).

Candidates can only use one of these courses to count as credit towards the group award - a maximum of 4 credits.

Standard Grades

F

Designated Standard Grades at Credit Level can contribute 4 credits each to the SGA in place of corresponding National Courses in the *specific section*.

The designated Standard Grade and its corresponding National Course, either of which can contribute to this SGA, are as follows:

Standard Grade	National Course
Biology at Credit Level	Biology (Int 2)

Note: Any Standard Grade at General or Credit Level can contribute 4 credits to the *open section*.

SVQs

G

Relevant Scottish Vocational Qualifications (SVQs) from occupational area 001 (Tending Animals, Plants and Land) can each contribute up to seven credits to the open section of the SGA.

SVQs at Level 2 contribute credits at Intermediate 2.

SVQs at Level 1 contribute credits at Intermediate 1.

The following are **examples** of relevant SVQs.

Code no	Relevant SVQs	Level
001 Tending Animals, Plants and Land		
SQA ¹	Amenity Horticulture	2
G2RE 21	Amenity Horticulture	1
G30J 22	Amenity Horticulture: Interior Landscaping	2
G30H 22	Amenity Horticulture: Sports Turf	2
G2RG 21	Animal Care	1
G30T 22	Caring for Animals	2
G30G 22	Environmental Conservation: Landscapes and Ecosystems	2
G27W 22	Extensive Crop Production	2
G310 22	Fish Husbandry	2
G2PW 21	Forestry	1
G27S 22	Forestry: Establishment and Maintenance	2
G27T 22	Forestry: Harvesting	2
G30V 22	Gamekeeping	2
G27V 22	Intensive Crop Production	2
G27X 22	Livestock Production	2
G300 22	Mixed Farming	2
G277 22	Poultry Production	2

¹This SVQ can be achieved in a number of contexts. Contact SQA for codes.

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