

**GEOGRAPHY**  
**(Advanced Higher)**

**Second edition – published February 2008**

**NOTE OF CHANGES TO ARRANGEMENTS  
THIRD EDITION PUBLISHED FEBRUARY 2008**

**COURSE TITLE:** Geography (Advanced Higher)

**COURSE NUMBER:** C208 13

**NATIONAL COURSE SPECIFICATION**

Course Details: Course assessment detail amended to reflect changes to duration and structure of Question Paper and removal of word limit for Geography Study and Issue in Folio

**National Unit Specification:**

Unit: DF49 13  
Geographical Issues

Unit Specification amended to clarify topics.

## National Course Specification

### Geography (Advanced Higher)

**COURSE CODE** C208 13

#### COURSE STRUCTURE

This Course has three mandatory Units as follows:

<i>DF4A 13</i>	<i>Geographical Methods and Techniques (AH)</i>	<i>1 credit (40 hours)</i>
<i>DF48 13</i>	<i>Geographical Study (AH)</i>	<i>1 credit (40 hours)</i>
<i>DF49 13</i>	<i>Geographical Issues (AH)</i>	<i>1 credit (40 hours)</i>

All Courses include 40 hours over and above the 120 hours for the component Units. This may be used for induction, extending the range of learning and teaching approaches, support, consolidation, integration of learning and preparation for Course assessment.

#### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates will normally be expected to have attained one of the following or equivalent:

- ◆ The Course at Higher Geography
- ◆ One or more of the Units at Higher Geography
- ◆ The Course or Units in other social subjects at Higher or Advanced Higher level

#### PROGRESSION

This Course or its Units may provide progression to:

- ◆ Units or the Course in another social subject at Advanced Higher
- ◆ related programmes of study in Higher National programmes
- ◆ Higher Education programmes in which geography is accepted as either an arts, social science or science subject

---

#### Administrative Information

**Publication date:** February 2008

**Source:** Scottish Qualifications Authority

**Version:** 02

© Scottish Qualifications Authority

This publication 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 Specification (including Unit Specifications) can be purchased from the Scottish Qualifications Authority for £7.50. **Note:** Unit Specifications can be purchased individually for £2.50 (minimum order £5).

## **National Course Specification: (cont)**

### **COURSE                      Geography (Advanced Higher)**

#### **CORE SKILLS**

This Course gives automatic certification of the following:

<b>Complete Core Skills for the Course</b>	Problem Solving	Higher
	Numeracy	Higher

#### **CREDIT VALUE**

The Advanced Higher Course in Geography is allocated 32 SCQF points at SCQF level 7.

SCQF points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

## National Course Specification: Course details

### COURSE                      Geography (Advanced Higher)

#### RATIONALE

The Course in Advanced Higher Geography builds on the concepts and skills developed at Higher level Geography. Candidates who have undertaken research or essay writing in other social subjects will find these skills and those associated with evaluating evidence very useful in Advanced Higher Geography. The achievement of the Advanced Higher Course award in Geography can contribute to the entry qualifications to both further and higher education.

The study of Geography at Advanced Higher level provides an increasingly sophisticated development of skills through a range of learning experiences. There is an increased emphasis on developing skills of independent study, co-operative learning, objective thinking and the ability to communicate clearly and confidently.

The skills of independent study, research and critical evaluation which are emphasised in Geography at Advanced Higher level are highly valued by higher education institutions and are transferable to many situations in general employment.

The principal aim of the Advanced Higher level Course in Geography is that, by using the concepts and techniques of geographical analysis, candidates develop a detailed understanding of aspects of the contemporary world which are of concern to all citizens. In addition, the Course enables candidates to develop progressively:

- ◆ an understanding of the ways in which people and the environment interact in response to physical and human processes at local, national and international scales
- ◆ an awareness of spatial relationships and an understanding of the changing world in a balanced, critical and sensitive way
- ◆ a life-long interest in, understanding of, and concern for the environment
- ◆ a geographical perspective on environmental issues and their significance
- ◆ general skills of research, analysis, synthesis, evaluation and presentation, including the use of IT
- ◆ techniques and terminology to collect, extract, analyse, interpret and explain geographical phenomena
- ◆ expertise in the use of a range of maps, diagrams, statistical techniques, written accounts and, where appropriate, new technology, to process and communicate information

A contribution is made to general and vocational education and the wider curriculum by:

- ◆ raising awareness of the links between the subject and other disciplines
- ◆ developing independent and co-operative learning as part of personal and social education
- ◆ developing problem-solving skills
- ◆ emphasising the development and application of learning skills relevant to everyday life

Appropriate key geographical concepts should be developed. In constructing a teaching programme, account should be taken of the following underlying concepts:

- ◆ location
- ◆ spatial patterns
- ◆ change
- ◆ diversity
- ◆ interdependence

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

- ◆ co-operation
- ◆ conflict
- ◆ sustainability
- ◆ global citizenship
- ◆ technology

These concepts should be introduced where they are appropriate to the topic of study.

An emphasis in the Advanced Higher Course is placed on the acquisition of a wide range of high order skills necessary in the research, evaluation and presentation of geographical information. As these skills are being developed the opportunity exists to broaden and deepen candidates' knowledge and understanding of geographical phenomena.

The *Geographical Methods and Techniques* Unit concentrates on broadening the knowledge and understanding of these skills by ensuring, through the Unit assessment, that candidates can competently use five of these skills. The centre selects the skills for which it wishes candidates to provide evidence.

In the *Geographical Study* Unit they must carry out independent research from primary/secondary sources and/or independent fieldwork, analyse their findings and provide an evaluation of the work they have undertaken.

The *Geographical Issues* Unit concentrates on the evaluation of sources and viewpoints connected to a geographical issue. Here the candidate must learn to evaluate the sources and viewpoints from a geographical perspective and write a short essay which critically evaluates them.

## **National Course Specification: Course details (cont)**

**COURSE**                      **Geography (Advanced Higher)**

### **COURSE CONTENT**

The Course content is divided into three Units, as detailed below. It is recommended that if centres do not teach the *Geographical Methods and Techniques* Unit first, they should teach it in parallel with the other Units. The *Geographical Study* Unit and *Geographical Issues* Unit provide opportunities to develop further and apply the skills specified in the *Geographical Methods and Techniques* Unit. In these Units candidates have to show a wider knowledge of these skills and use them in an integrated way. Research, analysis and presentation techniques are used to complete an externally assessed folio of work. Further details of these skills are contained in the Specifications for the Units which form part of this Course.

Detailed content relating to knowledge and understanding is also contained in these Unit Specifications. A summary of this skills content is given in the table below.

## Geographical Methods and Techniques Unit (Advanced Higher)

Skill area — fieldwork survey/ measurement and recording techniques	Skill area — statistical awareness	Skill area — production and interpretation of maps and diagrams
<p>Candidates require to be aware of the type of data which could be collected by <b>all</b> of the fieldwork methods and techniques as they may be required to process and analyse this data in a question in Section B of the exam paper.</p> <p>They will also be expected to demonstrate a range of these skills in their <i>Geographical Study</i>.</p>	<p>Candidates require to be able to carry out calculations involving appropriate statistical techniques.</p> <p>Calculations should always be checked and answers given to the appropriate degree of accuracy.</p> <p>Where possible, centres should make use of appropriate software packages.</p> <p>Candidates require to have an understanding of <b>each of the statistical techniques</b> as they may be required to use these to analyse data in a question in Section B of the exam paper.</p> <p>They will also be expected to demonstrate some of these skills in their <i>Geographical Study</i>.</p>	<p>Candidates should be able to present and analyse information using a variety of maps and diagrams. Candidates require to have a <b>working knowledge of each of these techniques</b> as they may be required to use these to analyse data in a question in Section A of the written paper.</p> <p>They will also be expected to demonstrate some of these skills in their <i>Geographical Study</i>. The <i>Geographical Issues</i> essay is also likely to require the use of these skills to evaluate sources and viewpoints.</p> <p>It is possible that some candidates will extend their knowledge of geographical methods and techniques beyond those given in the lists. This might occur where candidates wish to collect particular types of data for their <i>Geographical Study</i>, eg meteorological, or where another statistical technique is more appropriate to analyse their data than those given in the list.</p>

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Geographical Study Unit (AH)

This Unit requires candidates to use many of the geographical methods and techniques acquired in the *Geographical Methods and Techniques* Unit at Advanced Higher Geography. This is an investigative exercise and it requires candidates to research a topic in depth. This may be undertaken in the local area. Candidates will be expected to plan and research a *Geographical Study*. They will have to use appropriate techniques to analyse, evaluate and present information and their findings. The *Geographical Study* will involve the candidate in collecting and processing information from field studies and/or published sources such as census data.

#### Geographical Issues Unit (AH)

This Unit is designed to develop critical thinking and the ability to evaluate evidence from different sources. This skill can be taught in any areal context. Centres might wish to undertake this by in depth study of at least one geographical issue which relates to one or more of the sixteen topics noted in the Course content section of the Higher Geography Arrangements. These are:

- Atmosphere
- Hydrosphere
- Lithosphere
- Biosphere
- Population Geography
- Rural Geography
- Industrial Geography
- Urban Geography
- Rural land resources
- Rural land degradation
- River basin management
- Urban change and its management
- European regional inequalities
- Development and health

Candidates would also benefit by having studied part or all of the *Geographical Methods and Techniques* Unit at Advanced Higher level. The Unit also requires candidates to research, evaluate and summarise information.

Candidates who successfully demonstrate these skills in the Unit assessment will have carried out these tasks in a controlled environment in which the sources and viewpoints have been provided for them.

For Course assessment they will require to select a contemporary geographical issue, carry out research to identify different viewpoints which are contained in separate sources, summarise, evaluate and synthesize these viewpoints in an essay covering a maximum of 12 A4 pages.

## National Course Specification: Course details (cont)

**COURSE**                      **Geography (Advanced Higher)**

### **ASSESSMENT**

To achieve the Course award, the candidate must pass the Units as well as the Course assessment. The candidate's grade is based on the Course assessment.

The Course assessment consists of two components:

- 1 A question paper. This will assess, under controlled conditions, the ability of candidates to use a variety of geographical methods and techniques.
- 2 A folio of Course work which consists of two key pieces of work:
  - ◆ *Geographical Study* — a report on geographical research
  - ◆ *Geographical Issues* — an essay which critically evaluates an issue from a geographical perspective

These two pieces of work allow candidates to demonstrate, through fieldwork and other research techniques, their ability to use and integrate the skills learned in the *Geographical Methods and Techniques* Unit at Advanced Higher together with the range of skills gained through the study of geography at other levels. This folio of Course work assesses the skills acquired by candidates as they develop a more detailed understanding of the issues affecting aspects of the contemporary world. In view of this, the weighting attached to this component is greater than that for the question paper. To broaden candidates' knowledge and understanding, and to improve their skills, it would be advisable for candidates to choose a significantly different Issue to their Study.

The two components of the Course assessment will be weighted 30:70. The two parts of the folio will account for 40% (*Geographical Study*) and 30% (*Geographical Issues* essay).

### **Unit assessment**

*Geographical Methods and Techniques* Unit — A folder of evidence showing competence in each of three skill areas identified in the Unit.

*Geographical Study* Unit — A plan and an interim report based on one aspect of a geographical study.

*Geographical Issues* Unit — A critical evaluation of a geographical issue using sources and viewpoints provided.

A summary of the Unit and Course assessment objectives is contained in the following table.

## National Course Specification: Course details (cont)

### COURSE Geography (Advanced Higher)

#### Assessment objectives at Advanced Higher — Unit and Course assessment compared

Course assessment objectives	Specific objective of Unit assessment	Specific objective of Course assessment	Value added by Course assessment beyond Unit assessment
1. Knowledge of a wide range of geographical skills and the different contexts in which these ought to be used.	Demonstrate minimum competence in the use of a variety of skills <b>selected by centre</b> .	To apply skills to process and analyse <b>unfamiliar data</b> .	Data is unfamiliar, skill area is not selected by centre; candidate must have competence in all skills. Exam situation is controlled but some of techniques assessed internally may initially be undertaken as part of a group. Where this happens this should be declared.
2. Ability to undertake a structured study of a geographical nature which uses primary/secondary sources and which relies on a variety of presentation skills to report the findings.	The <b>process</b> of planning to collect, gather and analyse data collected from primary and secondary sources.	To <b>produce</b> a report which brings together research findings in a coherent and structured manner. This report will demonstrate high order skills of written and graphic communication.	The final product demonstrates the ability to bring all these skills together by seeing through a study from inception to completion. By confining this final product to a word and page limit it also assesses candidate ability to select relevant material and present it concisely.
3. Ability to carry out a critical evaluation of a geographical issue by identifying different viewpoints, from at least three sources, about the issue and writing an essay which synthesises these viewpoints in a way that allows a valid conclusion to be drawn.	Summarise and synthesise given <b>restricted viewpoints</b> presented to candidates on a topic with which they are likely to be familiar.	Research, evaluate and consider the value of extended viewpoints on an issue about which candidates choose to undertake research. Viewpoints must be summarised, synthesised and critically evaluated from a geographical perspective within a limited number of words.	Involves research. Candidates have to make judgements about the value of viewpoints based on background knowledge of their research topic. Presentation for Course assessment is confined by the page limit.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Details of the instruments for Course assessment:

##### The question paper:

The question paper (relating to the content of the *Geographical Methods and Techniques* Unit) will be of two hours 30 minutes duration and will consist of three sections, A, B and C. Questions in Section A will be out of 30 marks and questions in Section B will be out of 20 marks. The question in section C will be out of 10 marks.

**Section A** will contain two questions, **one** of which must be attempted. It will be based on the 1:25000 scale Ordnance Survey (OS) *Explorer Series* topographical sheets of England and Wales. The Scottish sheets will not be used in the exam. In addition to the OS map, supplementary information will be provided in the form of one or more of the following: maps, photographs, sketches or outline drawings or drawings based on photographs, statistics, and data about the area. Two questions based on this combination of maps and supplementary information will be set. One question will involve candidates in a decision making, problem solving or hypothesis testing exercise (such as the location and planning implications of a new airport, by pass road, inner city redevelopment or superstore). The other question will test competence in map interpretation in relation to the geography of the map sheet provided.

**Section B** will contain two questions, **one** of which must be attempted. The questions will involve candidates in data handling exercises, where they may be expected to process, interpret and analyse a given set of data and evaluate the technique used. These questions might also be used to evaluate the effectiveness of the practical application of some of these techniques.

**Section C** will contain one compulsory question. This question will relate to fieldwork techniques. It will require the candidate to explore issues which relate to the practical application of fieldwork gathering techniques and the analysis of data which might be obtained as a result of using those techniques.

Statistical formulae will be given and calculators may be used. An atlas must be provided by the centre for each candidate for use in the examination. It should be suitable for use at this level and be of a general type (ie not devoted to one region or purely thematic). Centres are responsible for ensuring that atlases used are clean copies and contain no additional material. Candidates must name on their script the title of the atlas used.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### The Folio:

This will consist of **two pieces of work**, namely:

- ◆ The Geographical Study

and

- ◆ The Geographical Issues essay

The **Geographical Study** (relating to the content of the *Geographical Study Unit*) will take the form of a report, which will have a **maximum** length of 25 sides of A4 paper or their equivalent (using only one side). The candidate should use Times New Roman font size point 12 or equivalent and set out their report using single Roman line spacing in the body of the report. Individual arrangements can be made for candidates with additional support needs and where this is necessary these should be equivalent to conditions outlined. Larger sheets should be folded to A4 size. Note that A3 sheets will count as two A4 sides and that overlays count as separate or extra sheets. The geographical study will be part of the ongoing Course work of the candidates and will form part of the externally assessed folio of work which will be submitted to SQA by a pre determined date.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

The **Geographical Issues** essay (relating to the content of the *Geographical Issues* Unit) will consist of the critical evaluation of at least three different sources and the viewpoints contained therein. It will have a **maximum** length of 12 sides of A4 paper or their equivalent (using only one side). The candidate should use Times New Roman font size point 12 or equivalent and set out the essay using single roman line spacing. Individual arrangements can be made for candidates with additional support needs and where this is necessary these should be equivalent to the conditions outlined. Larger sheets should be folded to A4 size. Note that an A3 sheet will count as two A4 sides and that each overlay counts as a sheet in its own right. The geographical issues essay will be part of the ongoing Course work of the candidates and will form the second part of the externally assessed folio of work.

**For both the geographical study and the geographical issues essay, a flat penalty of 10% of the marks available for the piece of work in question will be deducted once the stated page limit has been exceeded.**

The page limits apply to all pages that are submitted as part of the report or essay, regardless of their content, and will therefore include any cover, title page, contents page, maps, diagram, tables and appendices. The only exception to the rule on page limit applies to the bibliography which is excluded from the page count.

## National Course Specification: Course details (cont)

### COURSE Geography (Advanced Higher)

#### Criteria for marking Course assessment

For Course assessment candidates will be marked and graded on the basis of a number of key criteria.

Component	Total Number of marks	Criteria used	Number of marks	Detail of criteria
<b>Exam</b>	60	Section A	30	Marking instructions
		Section B	20	Marking instructions
		Section C	10	Marking instructions
<b>Folio :</b>	140	<b>Geographical Study</b>		
		Presentation	20	Structure, clarity of text, quality of diagrams, appropriateness of graphics
		Data and content	20	Rigour and relevance
		Techniques	20	Use of appropriate techniques showing understanding of their use
		Relationships	20	Description and analysis of relationships, conclusions
		<b>Geographical Issues</b>		
		Presentation	15	Structure, clarity of text, appropriate use of, and reference to diagrams, bibliography
		Research, content and relevance	15	Usefulness and relevance of source, discussion of partiality of the source, clarity of understanding and assessment of sources
		Structure and logical development	15	Depth of explanation of sources, relevant analysis of source, quality of conclusion
		Critical commentary	15	Clarity and depth of evaluation of sources, awareness of bias and exaggeration

#### GRADE DESCRIPTIONS

The candidate's grade will be based on the total score obtained from the Course assessment. The descriptions below indicate the nature of achievement required for the award at grade C and A in the Course.

### Knowledge and understanding

Element	Grade Description	Exemplification
<b>Grade C</b>	The candidate should be able to show a knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena	<ul style="list-style-type: none"><li>◆ Background knowledge clearly applied to most of the work but the skill brought to bear in using this is limited</li><li>◆ Most factual content will be accurate</li></ul>
<b>Grade A</b>	The candidate should be able to show a wide knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena	<ul style="list-style-type: none"><li>◆ Very sound background knowledge and understanding should be apparent in most of the work and this should be insightfully applied in a variety of contexts</li><li>◆ Factual content will be accurate throughout</li></ul>

### Evaluating

<b>Grade C</b>	The candidate should be able to analyse a range of complex geographical evidence, reach realistic and detailed conclusions and offer detailed and reasoned explanations for these, taking into account a wide range of viewpoints	<ul style="list-style-type: none"><li>◆ Analysis should be apparent but may often not get far beyond descriptive accounts of the phenomena being studied</li></ul>
<b>Grade A</b>	The candidate should be able to analyse in depth and detail a wide range of complex geographical evidence, reach well justified, realistic and detailed conclusions and offer detailed and reasoned explanations for these, taking into account a wide range of viewpoints	<ul style="list-style-type: none"><li>◆ The analysis should be thorough and use knowledge and understanding to provide a perceptive account of the contexts being studied</li><li>◆ This perceptive element of the candidate's work should be in evidence throughout their work showing understanding of bias and exaggeration</li></ul>

### Geographical methods and techniques

<b>Grade C</b>	The candidate should be able to use a range of appropriate geographical methods and techniques to interpret and analyse geographical phenomena	<ul style="list-style-type: none"><li>◆ Information will be presented in such a way that it can be understood but it lacks depth</li><li>◆ A variety of techniques will have been used but not always accurately</li></ul>
<b>Grade A</b>	The candidate should be able to use a wide range of appropriate geographical methods and techniques to give detailed interpretations and detailed analysis of geographical phenomena	<ul style="list-style-type: none"><li>◆ Information will be very well written and presented</li><li>◆ Techniques will be skillfully and accurately applied</li></ul>

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Evidence used for estimates and appeals

##### Estimates

To determine the suitability of the evidence for estimates, centres should measure it against the Grade Descriptions and exemplification illustrated in the table above. Evidence should cover each of the components of the Course assessment and relate to each of the three elements associated with the Grade Descriptions.

Where evidence meets these criteria and demonstrates the retention of knowledge and skills over a period of time, it ought to be sufficient to make a judgement for the purposes of estimates.

Care requires to be taken when considering an estimated grade for candidates. Evidence used to support estimates should be weighted to reflect that used for Course assessment purposes. The Course is marked out of a possible total of 200.

- ◆ The question paper is out of 60 marks and it contributes 30% to the Course award.
- ◆ The Geographical Study is out of 80 marks and contributes 40% to the Course award.
- ◆ The Geographical Issues essay is out of 60 and contributes 30% to the Course award.

Because of the nature of the evidence on which estimates are likely to be based, eg incomplete Studies and Essays, it will be difficult to replicate this assessment model exactly. Centres should ensure that due attention is paid to the relative proportion of each component when the estimates are being prepared.

Such evidence is likely, for the first component, to come from a controlled exercise or examination which reflects the examination paper. For the folio component, ie the Study and the Essay, there are a number of important ways in which it is possible to ensure that the evidence on which judgements are made is sound. Where it is available centres are encouraged to use and retain the following types of evidence:

- ◆ a controlled assessment instrument similar in nature to the external exam, eg a prelim with marking instructions
- ◆ a selection of work independently produced under controlled conditions which has been used for Unit assessment of the *Geographical Methods and Techniques* Unit
- ◆ fieldwork records used in research for the *Geographical Study*, eg a log book, data sheets
- ◆ draft copies of parts of , or all of the geographical study
- ◆ the 'Interim Report' and 'Plan' used in the Unit assessment of the *Geographical Study* Unit
- ◆ the essay written for the Unit assessment of the *Geographical Issues* Unit
- ◆ any evidence of research carried out for the geographical issues essay which has not been included in the final essay
- ◆ a list of sources consulted but not evaluated in the research of the issue in *Geographical Issues* Unit

Centres should be selective in the use of such evidence.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Appeals

For appeals purposes it is mandatory to provide additional evidence for the exam component. This could be based on evidence used to compile estimates. It is more difficult to assemble sound evidence for the folio component and in this case examiners would focus on reviewing the two pieces of work submitted in the folio. Centres are not required to submit additional evidence for the folio. Appeals evidence which consists of a wide range of unsorted information is unlikely to be successful.

Advice on Estimates and appeals is contained in the document entitled '*Estimates, Absentees and Assessment appeals-Guidance on Evidence requirements*' which is available on SQA's website.

#### QUALITY ASSURANCE

All National Courses are subject to external marking and/or moderation. External markers, visiting examiners and moderators are trained by SQA to apply national standards. SQA is currently seeking to assist centres by preparing exemplification of standards materials in a number of subject areas. This will be rolled out to all subjects in due course.

The Units of all Courses are subject to internal moderation and may also be chosen for external moderation. This is to ensure that national standards are being applied across all subjects.

Courses may be assessed by a variety of methods. Where marking is undertaken by a trained marker in their own time, markers meetings are held to ensure that a consistent standard is applied. The work of all markers is subject to scrutiny by the Principal Assessor and a PA report is published for all subjects.

## National Course Specification: Course details (cont)

### COURSE Geography (Advanced Higher)

#### APPROACHES TO LEARNING AND TEACHING

The Course content is divided into three Units, as detailed below.

DF4A	13	<i>Geographical Methods and Techniques</i> (AH)	1 credit (40 hours)
DF48	13	<i>Geographical Study</i> (AH)	1 credit (40 hours)
DF49	13	<i>Geographical Issues</i> (AH)	1 credit (40 hours)

The following resources produced by ‘Learning and Teaching Scotland’ provide useful support materials for this Course:

1. Geography: Flexible Learning Resource Pack: Advanced Higher
2. Geographical Issues: Annotated Bibliographies: Advanced Higher
3. Geography: Geographical Methods and Techniques: Statistical Awareness – Staff Briefing and Student Notes.

These support materials are available on the website [www.LTScotland.org.uk/nq](http://www.LTScotland.org.uk/nq).

#### Structure

The Units in this Course can be taught separately or in an integrated manner. It is, however, recommended that centres teach the *Geographical Methods and Techniques* Unit first. The *Geographical Study* Unit and the *Geographical Issues* Unit provide opportunities to develop further, and apply the skills specified in the *Geographical Methods and Techniques* Unit. In these Units candidates have to show a wider knowledge of these skills and to integrate their use through the research, analytical and presentation techniques required to complete a folio of Course work. This is necessary for the Course assessment.

#### Context

The context in which this Course is taught is areal free. While this is true, it is likely teaching will take place within a variety of contexts and that candidates will not work exclusively in one. They should be able to demonstrate their skills in both familiar and unfamiliar contexts. The freedom in this area is designed to allow centres to focus on topics and issues they feel are likely to be of most interest to their candidates.

#### Fieldwork

While all the geographical methods and techniques can be taught in the classroom, geography candidates should be experiencing real situations first hand. For many candidates the chance to gain experience in fieldwork is a positive element of the Advanced Higher Course. In many centres a strong fieldwork element is built in to the Course and this continues as the Course progresses. Others choose to concentrate fieldwork into a particular period in the session and arrange for candidates to visit field studies centres both for day and for residential visits. The scope for particular types of fieldwork will vary depending on the location of a centre. For example an urban centre may find it more straightforward to engage candidates in primary research involving some of the human based fieldwork techniques, whereas rural centres may have access to opportunities for doing work on physical fieldwork techniques.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Methods and techniques

The methods and techniques acquired through the *Geographical Methods and Techniques* Unit are intended to be used in the preparation of the geographical study and the geographical issues essay. Competence in these techniques is necessary for only a sample from the given list for Unit assessment but for Course assessment candidates ought to have a knowledge, understanding and ability to apply all the skills. In selected cases it is likely that candidates will carry out a Study which is best researched, analysed or presented by including the use of a technique which is not listed. In these circumstances centres would be expected to make sure that candidates are aware of any additional techniques so that they can use those most appropriate.

#### Geographical Study

Fieldwork carried out as part of the teaching process might be used by candidates for the *Geographical Study* Unit. This is acceptable. This is likely to be limited in nature and when the study commences much deeper and broader research will be necessary. Where this happens the centre will have an additional responsibility. It must ensure that the research each candidate takes on should be based on a plan which is drawn up independently and for which each can, if required, provide a clear rationale. In carrying out research it is often essential, both for practical and/or safety reasons, that there is some collaboration in the collection of data. This is also acceptable but again centres will be required to ensure that the analysis of data is carried out independently and conclusions produced are those of individual candidates. It is very likely that the techniques used to present the study will reflect the individuality of candidates' work.

The topic candidates choose for their geographical study should be carefully monitored by centres. To achieve a good mark for this part of the folio, topics must have geographical relevance, be set in a spatial context and allow wide scope for researching and analysing relationships. The best studies involve hypothesis testing and include the concepts of change, conflict, comparison and/or a problem or issue. Candidates would benefit from ready and regular access to the specific location or data on which their study is based. In most cases it will be appropriate to base the study in a local setting.

Examples of suitable geographical study research topics include:

- ◆ Analysis of the relationships between stream velocity and sediment size in five different sections of a small stream.
- ◆ Analysis of changes in the amount and nature of soil organic matter along a three transects over a sand dune system
- ◆ A comparative analysis of daily temperature and rainfall records for three months taken at school with corresponding records from the nearest meteorological station
- ◆ Evaluation of relative water quality at a number of locations along a river based on simple water chemistry (measured by pH, conductivity and using SEPA records if available) and simple biological indicators (measured by key species present; total number of species present).
- ◆ An analysis of the patterns of customer use of different retail outlets in a large shopping development and commentary on the causes of these use patterns.
- ◆ The impact on a local community of a major road building/improvement scheme (e.g. M74C; M77 extension; A725 orbital; A92 dual carriageway; Aberdeen Western By-pass; Forth Road Bridge access roads)
- ◆ The relationships between community health and built environmental quality in two contrasting small urban areas.
- ◆ An analysis of the changing pattern of retailing in the central business district of a large urban centre between 1900 and the present day. e.g. Perth; Paisley; Kilmarnock; Galashiels; Elgin; Arbroath.

## National Course Specification: Course details (cont)

### COURSE                      Geography (Advanced Higher)

#### Geographical Issue

The geographical issue on which candidates write their critical evaluation essay should be the product of input from the teacher/lecturer and the candidate. The skill of critically evaluating sources is a higher order skill and candidates will require significant advice on this. The Unit provides scope to develop this skill by providing an opportunity to study, at much greater depth, one or more of the topics as listed in the *Geography Issues* Unit in Appendix 1. Such a focus for their study will extend the knowledge base of the candidates and provide an opportunity to improve their ability to critically evaluate information with which they have been provided. It is intended that the Unit assessment of the *Geographical Issues* Unit will not only demonstrate the degree of competence candidates have acquired in this skill but, at the same time, it will also be part of the formative process of improving the skill of critically evaluating sources and the viewpoints expressed within them.

For the Course assessment the choice of issue about which the essay is to be written should be made with care. The best issues involve hypothesis testing.

- ◆ Teachers/lecturers should be sure that the Issue can be linked to one of the topics in the Higher Course Arrangements and that there are sufficient varieties of sources and viewpoints on which candidates can comment.
- ◆ The sources should be sufficiently substantial to allow the critical evaluation to be carried out. This means that the source should include arguments, data, analysis and content which will allow candidates to assess the quality of the viewpoint and its geographical perspective. There must be at least three sources, but they do not need to occupy totally different perspectives on the issue.
- ◆ The viewpoints could come to the same conclusion but the arguments may be based on very different criteria, eg the construction of a dam may be opposed by two groups — residents who will be displaced and conservationists who express concern about the environmental impact of such a scheme.
- ◆ To obtain good examples of sources with different viewpoints it is very likely that specific examples or case studies will provide the best resource for this type of work. Broad global themes, eg rain forest destruction, tend not to provide such focused material for critical evaluation. While the teacher/lecturer should have a major input into the choice of topic and the use of resources, it is expected that candidates will identify, select and evaluate the sources and data they use.
- ◆ Information in relation to this identification of suitable sources should be retained by the candidate as it could be used to provide evidence of the process he or she has gone through in the production of the essay. This could be valuable evidence for appeals purposes.

Good essays are likely to provide evidence of:

- ◆ a balanced and objective assessment of the sources based on theoretical evidence (background knowledge) and the evidence in the source
- ◆ evaluation of the quality of conclusions drawn from data contained in sources
- ◆ well structured, logical writing
- ◆ effective use of diagrams where appropriate
- ◆ clear evidence (in a bibliography) of sources used
- ◆ the candidate's own words and not passages 'lifted' from the sources

Examples of good themes for critical evaluations include:

- ◆ the siting of a shopping or housing development in a controversial location
- ◆ a development or issue (eg quarry, wind farm) in a National Park

## National Course Specification: Course details (cont)

### COURSE **Geography (Advanced Higher)**

- ◆ management of coastal erosion or flooding (eg engineered v non engineered solutions)
- ◆ case studies of different types of development programmes in economically less developed countries (regional or, in small countries a national focus)
- ◆ land use conflict issues
- ◆ management strategies to deal with desertification in a particular area
- ◆ the case for road building v public transport investment. This would require having an environmental focus

This list is neither prescriptive nor exhaustive.

### CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for this Course. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

### GEOGRAPHY IN A BROADER CONTEXT

A number of national initiatives and programmes have been designed to promote themes that are important to contemporary society such as citizenship and enterprise. These themes contribute to, individual subjects and Courses by making connections beyond the subject boundaries and enrich the learning experience. Similarly, the specialist knowledge and skills developed through study of a particular subject contributes to the understanding of these themes.

#### Cross-curricular themes and issues in Geography

The nature of Geography, crossing as it does many of the inter-disciplinary divides, means that geographical education has traditionally been imbued with cross-curricular themes. At all levels, the Unit Specifications allow teachers and students to continue to exploit opportunities for learning experiences which go beyond the bounds of the subject. Many of the themes encompassed within current initiatives such as education for citizenship, enterprise in education, health education and the national priorities for education, can be found within the Specifications for the National Courses in Geography.

Education for citizenship equips young people with the knowledge and skills which develop their ability to become active and responsible citizens. Within the Units of Intermediate 1, Intermediate 2 and Higher Courses, students have the opportunity to explore connections between human cultures and the physical world in which they live.

Specifically, in the Intermediate 1 and Intermediate 2 Courses, the impact of human activities on the environment is explored in a variety of contexts within the British Isles in Unit 1. In Unit 2, with a more global context, differences in economic development and population change underline the need for global citizenship. Unit 3 focuses on the relationships between the physical and human environment, and extends the themes of sustainable development. Respect for cultural and community diversity may be explored through studies of the management of urban change, population change (at all levels), and European Regional Inequalities (Higher).

## **National Course Specification: Course details (cont)**

### **COURSE                      Geography (Advanced Higher)**

Health education is explored in both the Intermediate and Higher Courses, with the Specifications at both levels highlighting differences in health across the globe and specifically including reference to AIDS. Implicit is a study of healthy lifestyles.

Enterprise in Education highlights the need to equip young people with the skills to prosper in a changing society. At all levels students have the opportunity to increase knowledge relevant to the world of work through studies of technological change and change in manufacturing methods. Awareness of the changing nature of the world of business, of working life and economic activity are implicit in the Specifications for Intermediate 1, Intermediate 2 and Higher. At Advanced Higher level, self-motivation and independence are encouraged in the undertaking of practical activities.

## National Unit Specification: general information

**UNIT** Geographical Methods and Techniques (Advanced Higher)

**CODE** DF4A 13

**COURSE** Geography (Advanced Higher)

### SUMMARY

This Unit builds on the skills and methods developed progressively in the study of Geography from Standard Grade and Intermediate 1 and 2 to Higher Geography.

The aim of this Unit is to ensure that candidates develop a knowledge and understanding of a wide range of geographical methods and techniques. This knowledge and understanding can be developed by applying most, if not all, to fieldwork orientated activities. The Unit also considers the particular circumstances in which it is most appropriate to use these techniques. The methods and techniques studied relate to three skill areas: namely fieldwork, statistical awareness and the production and interpretation of maps. In particular, candidates will have to show:

- ◆ knowledge and use of one technique for gathering information about the physical environment.
- ◆ knowledge and use of one technique for gathering information about the human environment
- ◆ knowledge and exemplification of the use of one statistical technique to process and analyse geographical data
- ◆ knowledge and exemplification of the skill of analysing information displayed on maps or diagrams
- ◆ knowledge and use of one technique to present information using maps or diagrams

In each of the above cases the technique in which competence is demonstrated can be selected from the range of techniques which candidates are expected to know. Appendix 1 contains the skills and content which will be covered in this Unit and which will be sampled to provide the evidence required for the Unit.

---

### Administrative Information

**Superclass:** RF

**Publication date:** February 2008

**Source:** Scottish Qualifications Authority

**Version:** 02

© Scottish Qualifications Authority

This publication 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 specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50. (A handling charge of £1.95 will apply to all orders for priced items.)

## National Unit Specification: general information (cont)

### UNIT Geographical Methods and Techniques (Advanced Higher)

Where the Unit is being studied as part of the Course at Advanced Higher candidates will, in the *Geography Study Unit*, be able to apply these methods and techniques to the specific research topics they are investigating.

#### OUTCOMES

- a) Demonstrate knowledge, understanding and application of complex geographical methods and techniques (GMTs) for gathering information.
- b) Use statistical techniques to analyse geographical data in order to identify relationships.
- c) Present complex geographical information.
- d) Analyse complex geographical information presented in the form of maps and associated data.

#### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates will normally be expected to have attained one of the following or equivalent:

- ◆ the Course at Higher Geography
- ◆ One or more of the Units at Higher Geography
- ◆ The Course or Units in other social subjects at Higher or Advanced Higher level

#### CREDIT VALUE

1 credit at Advanced Higher (8 SCQF points at SCQF level 7\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

#### CORE SKILLS

This Unit gives automatic certification of the following:

<b>Complete Core Skills for the Unit</b>	Numeracy	Higher
--	----------	--------

## **National Unit Specification: statement of standards**

### **UNIT**                      Geographical Methods and Techniques (Advanced Higher)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME 1**

Demonstrate knowledge, understanding and application of complex geographical methods and techniques (GMTs) for gathering information.

##### **Performance Criteria**

- a)        Select an appropriate GMT for the type of information being gathered.
- b)        Apply the selected GMT in such a way that valid and reliable information is gathered.

#### **OUTCOME 2**

Use statistical techniques to analyse geographical data in order to identify relationships.

##### **Performance Criteria**

- a)        Accurately analyse the geographical data.
- b)        Draw conclusions to reveal positive, negative or no relationship.

#### **OUTCOME 3**

Present complex geographical information.

##### **Performance Criteria**

- a)        Choose a format appropriate to the type of information being presented.
- b)        Clearly and accurately present the information.

#### **OUTCOME 4**

Analyse complex geographical information presented in the form of maps and associated data.

##### **Performance Criteria**

- a)        Demonstrate a clear understanding of relationships within complex geographical information.
- b)        Analyse complex geographical information to reach a valid conclusion.

## National Unit Specification: statement of standards (cont)

### UNIT Geographical Methods and Techniques (Advanced Higher)

#### EVIDENCE REQUIREMENTS FOR THE UNIT

Evidence to demonstrate successful completion of this Unit should be gathered by candidates/centres as an ongoing assignment. The candidate will present a completed folder of work as evidence. This evidence must show competence in each of the three skill areas within the Unit, namely fieldwork techniques, statistical awareness and the production and interpretation of maps. As evidence is collected it should clearly demonstrate candidate ability in all the Outcomes and Performance Criteria related to these skill areas. The table below sets out the specific pieces of evidence required in the folder.

Skill area	Specific evidence	Related Outcomes
Fieldwork techniques	<b>one</b> technique associated with physical geography <b>AND</b> <b>one</b> technique associated with human geography	Outcome 1
Statistical awareness	<b>one</b> example showing application of statistical technique to process data	Outcome 2
Production and interpretation of maps and diagrams	<b>one</b> example of the production of a map or diagram <b>AND</b> <b>one</b> example of map interpretation based on a 1:25000 OS map and associated data, eg transects, overlays, tables	Outcome 3 Outcome 4

The areas in which the skills/techniques should be demonstrated are identified in Appendix 1.

Candidates should also complete a checklist (ratified by their tutor) which should be kept with their folder as the assignment evidence is gathered. This should show the techniques for which they have gathered the necessary evidence. The NAB for this Unit provides an example of an appropriate approach to the assessment of this Unit.

## National Unit Specification: support notes

### UNIT Geographical Methods and Techniques (Advanced Higher)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

#### GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is one of three mandatory Units which together make up the Course in Advanced Higher Geography. The other Units are the *Geographical Study* and *Geographical Issues*. Within this Unit candidates have to work on three skill areas, namely:

- ◆ fieldwork methods and techniques
- ◆ statistical awareness
- ◆ production and interpretation of maps and diagrams

The Unit aims to ensure that candidates have a knowledge, understanding and the ability to use a wide range of geographical methods and techniques, by building on the skills developed at other levels in the geography hierarchy of Units and Courses. To adequately cover the range of techniques it is very likely that this Unit will involve candidates in direct fieldwork activity. Although the Unit *Geographical Methods and Techniques* only requires candidates to demonstrate awareness of, and ability to use, a limited range of methods and techniques, the wide range of skills developed in this Unit is vital to the successful completion of tasks associated with the production of a geographical study in the *Geographical Study* Unit. Indeed, centres may consider it useful to teach some candidates methods and techniques beyond those listed in the *Geographical Methods and Techniques* Unit to allow them to maximise the scope of their study in the *Geographical Study* Unit.

Appendix 1 contains the skills and content which will be sampled to provide the evidence required for the Unit.

#### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

##### Teaching order

If candidates are studying for the Course at Advanced Higher, it is recommended that centres teach the *Geographical Methods and Techniques* Unit first. The *Geographical Study* Unit and *Geographical Issues* Unit provide opportunities to develop further and apply further the skills specified in the *Geographical Methods and Techniques* Unit.

##### Methodology

The methodology used by teachers/lecturers will be built on existing good practice. Teacher/lecturer exposition and note-taking from textbook, information sheets and a wide variety of other resources may form the basis of class work in this Unit. The nature of the Unit is such, however, that other teaching strategies may be considered. Many of the methods and techniques could be taught in a single classroom based activity using a resource such as the 'Flexible Learning Resource Pack' and 'Geographical Methods and Techniques: Statistical Awareness – Staff Briefing and Student Notes' published by Learning and Teaching Scotland and distributed to centres in 2002.

These support materials are available on the website [www.LTScotland.org.uk/nq](http://www.LTScotland.org.uk/nq).

## National Unit Specification: support notes (cont)

### UNIT Geography: Geographical Methods and Techniques (Advanced Higher)

On the other hand fieldwork could be used as a focus for much of the learning and teaching. A centre might devise a series of fieldwork exercises which give candidates practical experience in gathering data and then follow this up by processing this in the classroom by the use of appropriate statistical and mapping/presentation techniques. Some of this could then be used as a basis for work candidates undertake for their geographical study in the *Geographical Study* Unit.

#### Skills and learning experiences

The Unit is also a focus for the teaching of skills associated with the interpretation of 1:25000 Ordnance Survey maps and use of atlases. Centres may be able to provide maps of this scale for their own area and give candidates the opportunity to use them in familiar circumstances. In most cases work on map reading, interpretation and analysis will focus on areas with which candidates are unfamiliar. Work on these skills should require candidates to study land use, actual and in some cases proposed, and relate this to additional information provided about the area under study. Map interpretation and analysis should contain examples from a variety of urban and rural contexts. This particular skill contributes 30 out of the 60 marks in the examination paper. If centres are studying this Unit as part of the Course they are advised to programme their teaching plan to ensure that adequate time is devoted to the development of these skills.

#### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

The evidence for Unit assessment samples the range of techniques with which candidates become familiar. This evidence can consist of five quite separate tasks which have been selected from the candidate's work during the Unit and that show competence in the related Outcome. Alternatively, centres might choose to construct a class exercise in which candidates conduct a piece of research and follow this through by processing data obtained, and then by presenting this in the form of maps and/or diagrams. Where such a strategy is adopted it will be necessary to ensure that the techniques used are contained in the list of methods and techniques in this specification. Care will also have to be taken by the centre to ensure the authenticity of the work presented by candidates. It is quite acceptable for candidates to work in groups to collect information but the evidence retained for assessment ought to clearly be the candidate's own work. This also applies for evidence related to the other skill areas. Centres may wish to consider using some of the extra 40 hours available for assessment in the Course to set up a controlled situation when candidates produce their personal evidence.

Where the checklist or technique has not been completed satisfactorily the candidate should be given an opportunity for reassessment. This could involve them in either reworking the original checklist/technique or completing a different one.

The pieces of work which demonstrate competence in the Outcomes for each Unit could also demonstrate a level of achievement equivalent to a grade C in the Course. The same piece of work may be assessed against the Grade Descriptions for the relevant part of the external Course assessment to ascertain whether an A or B can be recorded as a Course estimate or as evidence in the case of an appeal. For details of the Grade Descriptions for external assessment, refer to the Course Specification.

## **National Unit Specification: support notes (cont)**

**UNIT**      Geographical Methods and Techniques (Advanced Higher)

### **CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for this Course. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## APPENDIX 1

The skills and content sampled to show candidates have achieved the Outcomes are identified below.

### **Skill area — fieldwork survey/measurement and recording techniques**

Candidates should undertake fieldwork in at least **two** of the following areas, **one from each list**. Evidence of competences in these two methods and techniques will be required for Unit assessment. These techniques can be used and further developed to aid research in the geographical study.

List of skills:

- a) Physical topics
  - ◆ morphological mapping
  - ◆ vegetation sampling
  - ◆ slope analysis
  - ◆ stream analysis
  - ◆ soil profiles and characteristics
  - ◆ pebble analysis — size, shape and rock type
  
- b) Human topic
  - ◆ rural land use mapping
  - ◆ urban land use mapping
  - ◆ traffic, pedestrian and environmental quality surveys
  - ◆ questionnaire design and implementation
  - ◆ use of secondary sources
  - ◆ Reilly's gravity law
  - ◆ nearest neighbour analysis (area, linear, clustered)

If candidates intend to sit the Course assessment, they will require to be aware of the type of data which could be collected by all of the fieldwork methods and techniques and the factors affecting the gathering, processing and analysis of the data. They may be required to process and analyse this data in the written paper. They will also be expected to demonstrate a range of these skills in their geographical study.

### **Skill area — statistical awareness**

Candidates require to be able to carry out calculations involving appropriate statistical techniques from the list below.

List of skills/techniques:

- ◆ sampling — random, systematic, stratified
- ◆ handling different data types — nominal, ordinal, interval, ratio
- ◆ graphical presentation of data — systems diagrams, logarithmic, kite and scatter graphs, polar and triangular graphs, dispersion diagrams, bipolar analysis
- ◆ descriptive statistics — measures of central tendency — mean, median, mode  
— measures of dispersion — standard deviation
- ◆ introductory statistical testing — nearest neighbour, chi squared, Spearman's rank correlation coefficient, Pearson's product moment correlation coefficient, linear regression

## APPENDIX 1 (cont)

Calculations should always be checked and answers given to the appropriate degree of accuracy. Where possible, centres should make use of appropriate software packages. For the purposes of Unit assessment they should retain evidence of the application of one of these techniques.

If candidates intend to sit the Course assessment they will require to have an understanding of each of the statistical techniques as they may be required to use these to analyse data in a question in Section B of the written paper. They will also be expected to demonstrate some of these skills in their geographical study.

### **Skill area — production and interpretation of maps and diagrams**

Candidates should be able to present and analyse information using a variety of maps and diagrams. The suggested techniques they should be able to demonstrate are listed below.

For Unit assessment they are required to retain one piece of evidence which shows the production of maps or diagrams **and** one piece of evidence showing their ability to interpret maps.

List of skills/techniques:

- ◆ design and layout of maps — principles of lettering, line work and shading, dot maps, isoline maps, choropleth maps, proportional symbols, divided proportional symbols and flow maps
- ◆ interpretation of Ordnance Survey (OS) maps and related data
- ◆ topographic analysis based on Ordnance Survey (OS) maps — cross-sections, belt transects and river profiles

If candidates intend to sit the Course assessment they will require to have a working knowledge of each of these techniques as they may be required to use these to analyse data in a question in Section A of the written paper. They will also be expected to demonstrate some of these skills in their geographical study. The geographical issues essay is also likely to require the use of these skills to evaluate sources and viewpoints.

The lists of methods and techniques above indicate those which could be examined in the Course assessment. It is possible that some candidates will extend their knowledge of geographical methods and techniques beyond those given in these lists. This might occur where candidates wish to collect particular types of data for their geographical study, eg meteorological, or where another statistical technique is more appropriate to analyse their data than those given in the list.

## National Unit Specification: general information

**UNIT** Geographical Study (Advanced Higher)

**CODE** DF48 13

**COURSE** Geography (Advanced Higher)

### SUMMARY

The Geographical Study Unit builds on and uses many of the skills developed in the *Geographical Methods and Techniques* Unit at Advanced Higher. It also uses the knowledge gained from the study of the Units and Course at Higher level in Geography.

As candidates should use several of the methods and techniques developed during the *Geographical Methods and Techniques* Unit at Advanced Higher level it is advised that candidates do not undertake this Unit until the *Geographical Methods and Techniques* Unit is at least partially completed. Where the Unit is being taken as a stand alone Unit, teaching will have to be tailored to meet the needs of individual candidates.

The aim of this Unit is to provide candidates with the knowledge and skills to carry out and complete a geographical study. Candidates would benefit from working in the field to gather information. The assessment concentrates on skills of gathering and processing information. During the study the candidates will demonstrate an ability to:

- ◆ plan and research the study by setting clear aims and objectives and appropriate gathering techniques which should include fieldwork
- ◆ select, use and accurately apply appropriate techniques to process and analyse the gathered information. This will require the candidate to use methods and statistical techniques appropriate to the data collected
- ◆ evaluate the techniques used throughout the study and make critical comment about the research process

---

### Administrative Information

**Superclass:** RF

**Publication date:** February 2008

**Source:** Scottish Qualifications Authority

**Version:** 02

© Scottish Qualifications Authority

This publication 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 specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50. (A handling charge of £1.95 will apply to all orders for priced items.)

## National Unit Specification: general information (cont)

**UNIT** Geographical Study (Advanced Higher)

### OUTCOMES

- a) Plan and research a geographical study.
- b) Select and use techniques to gather and analyse information.
- c) Evaluate the learning gained through the research process.

### RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates will normally be expected to have attained one of the following or equivalent:

- ◆ the Course at Higher Geography
- ◆ one or more of the Units at Higher Geography
- ◆ the Course or Units in other social subjects at Higher or Advanced Higher level

### CREDIT VALUE

1 credit at Advanced Higher (8 SCQF points at SCQF level 7\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

### CORE SKILLS

This Unit gives automatic certification of the following:

<b>Complete Core Skills for the Unit</b>	Problem Solving	Higher
--	-----------------	--------

## **National Unit Specification: statement of standards**

### **UNIT        Geographical Study (Advanced Higher)**

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME 1**

Plan and research a geographical study.

##### **Performance Criteria**

- a) Create a plan to include clear aims and precise structured research questions.
- b) Identify the sources of information to permit the collection of information relevant to the research questions.

#### **OUTCOME 2**

Select and use techniques to gather and analyse information.

##### **Performance Criteria**

- a) Select and use appropriate techniques to gather information.
- b) Accurately analyse the information gathered.

#### **OUTCOME 3**

Evaluate the learning gained through the research process.

##### **Performance Criteria**

- a) Review research techniques to reach reasoned conclusions about their effectiveness.
- b) Justify conclusions reached about the effectiveness of the research.

### **EVIDENCE REQUIREMENTS FOR THE UNIT**

Candidates will be required to provide two pieces of evidence in a written or recorded oral format, namely:

- a) An Outline for an Interim Report
- b) an Interim Report based on one aspect of a geographical study

The Interim Report is a holistic assessment carried out under controlled and supervised conditions in a single continuous period of one hour.

The Outline for the Interim Report which candidates take into the formal situation when they write their Interim Report can be the subject of discussion between and guidance from the candidates' teacher/lecturer. It can be revised as part of the process. This may help in borderline cases where a candidate could be directed to return to some aspect of his/her report (reassessment) if some part of it was particularly weak and would prevent a pass being awarded.

## **National Unit Specification: statement of standards (cont)**

### **UNIT        Geographical Study (Advanced Higher)**

The Outline should be attached to the Interim Report and these two pieces of evidence will be required for the assessment of the Unit. The main function of the Outline is to support candidates in the writing of their Interim Report and can be used to support an assessment decision. It is checked as part of the assessment but by itself cannot provide evidence to permit the award of a Unit pass. To pass the Unit candidates will have to provide evidence that they have met the standards set in all Outcomes and for each of the Performance Criteria. The marking guidelines for this assessment, illustrated in the NAB, demonstrate the standard of evidence which will be required.

## National Unit Specification: support notes

### UNIT Geographical Study (Advanced Higher)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

#### GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

In most centres it is likely that this Unit will be taken by candidates who intend to complete the Advanced Higher Course in Geography. This Unit contributes to the Advanced Higher Course by providing the learning and teaching opportunities to enable candidates to complete a geographical study of up to 25 A4 pages or equivalent in length. However, the Unit is designed to permit candidates who do not wish to complete a full geographical study to obtain a Unit pass. This Unit focuses on the planning, researching, analysing and evaluating of a single research exercise, or in the case of the geographical study, one aspect of the study.

#### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Candidates are likely to be taking this Unit in a variety of circumstances:

- ◆ the full geographical study is being completed as part of the Course
- ◆ the initial intention is to complete the full geographical study but the final product is not produced
- ◆ the Unit is seen as an end point and research is focussed on a single topic rather than a broader geographical study

#### Learning Experience

##### Teaching order

In deciding how this Unit is to be delivered teachers/lecturers are advised to consider the profile of the candidate group involved. As this may change from year to year the approach centres adopt to teaching may vary as well.

##### Methodology

In most cases candidates will begin this Unit with the intention of completing it as part of the Advanced Higher Geography Course. Where this is the case centres might, rather than teach the Units in sequence, decide to integrate the teaching of the *Geographical Methods and Techniques* Unit and the *Geographical Study* Unit. At an early stage in the session candidates will, therefore, become aware of the variety of geographical methods and techniques which are most likely to assist them as they conduct their research and analysis. It might be possible to combine aspects of the assessment of the *Geographical Methods and Techniques* Unit and the *Geographical Study* Unit. The *Geographical Methods and Techniques* Unit assessment focuses on the ability to apply selected techniques while the *Geographical Study* Unit concentrates on reviewing and evaluating the techniques candidates have used in the planned research they are conducting. Assessment for the *Geographical Methods and Techniques* Unit and the *Geographical Study* Unit might, therefore, focus on these different aspects of the same techniques.

## **National Unit Specification: support notes**

### **UNIT        Geographical Study (Advanced Higher)**

#### **Skills and learning experiences**

In planning the teaching of this Unit centres should ensure that the following key skills and experiences are built in to the work programme. Candidates should be:

- ◆ engaging in wide ranging independent reading relevant to their geographical study
- ◆ making use of relevant terminology, and advanced skills, concepts and ideas
- ◆ collecting, extracting, interpreting, analysing and presenting geographical evidence
- ◆ gathering and systematically recording information derived from a variety of appropriate sources, such as fieldwork, maps, books, notes, graphs, statistics and audio visual materials

## National Unit Specification: support notes (cont)

### UNIT Geographical Study (Advanced Higher)

- ◆ aware of the type of information it is necessary to retain to write comprehensive bibliographies
- ◆ developing the skills of extended communication in the form necessary to produce a geographical study; opportunities should be provided for revising and redrafting of extended writing following critical review
- ◆ taking part in formal and informal discussion and debate based on and informed by geographical evidence and knowledge in order to develop the ability to think independently and make informed judgements
- ◆ developing individual and independent learning skills, especially those relating to the preparation and writing of the geographical study

Opportunities for extension, remediation and consolidation should be built into the Unit; how this is organised will depend on the teaching approach. Time should be allowed for remediation and revisiting of Unit assessments where Outcomes have not been achieved.

Time ought to be set aside not only to ensure that candidates select appropriate research or study topics but that they also gain experience in reviewing and adapting any research work they carry out. One to one, group discussions and presentations to others may provide useful experiences for candidates in this type of review and self appraisal. A series of candidate led tutorials might be organised to encourage discussion about research and analysis carried out by them. Further advice on approaches to the teaching of this Unit is available in '*Geography: Flexible Learning Resources Pack (Advanced Higher)*', '*Geographical Issues; Annotated Bibliographies: Advanced Higher*' and '*Geographical Methods and Techniques: Statistical Awareness — Staff Briefing and Student Notes*' produced in 2002 by Learning and Teaching Scotland. These support materials are available on the website [www.LTScotland.org.uk/nq](http://www.LTScotland.org.uk/nq).

### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

The Unit assessment is, in most cases, likely to be based on some aspect of research and analysis carried out in connection with a larger geographical study undertaken as part of the Course. As the evidence for this is likely to be developed over a period of time, candidates and centres ought, at an early stage of the Unit, select where the focus for Unit assessment will lie. Once this decision has been taken particularly careful records of this aspect of the study should be kept. These would not only support the candidate when it comes to writing the Interim Report and its Outline but these could also provide additional evidence of the performance of candidates should this be required for estimates or appeals. Records of research on additional areas might also contribute to evidence which permits Course estimates above level C.

### CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for this Course. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## National Unit Specification: general information

**UNIT** Geographical Issues (Advanced Higher)

**CODE** DF49 13

**COURSE** Geography (Advanced Higher)

### SUMMARY

By studying a geographical issue, this Unit develops the skill of critical thinking through the evaluation of viewpoints taken from different sources. In developing the skills of evaluating viewpoints candidates will, through in depth reading and discussion, increase their knowledge and understanding of the key geographical issues related to the study/studies they undertake. This knowledge and understanding will concentrate on one or more topics as listed in Appendix 1 to this Unit. Candidates who have previously studied geography at Higher level might extend their geographical knowledge by continuing with the study of any topics covered at that level. However, their knowledge could be extended in other areas if this is considered appropriate.

The aims of this Unit are to develop an ability to:

- ◆ objectively describe and summarise viewpoints about a key geographical issue
- ◆ produce an evaluation, from a geographical perspective, which shows an understanding of differing viewpoints
- ◆ produce a reasoned and critical evaluation which balances sources with each other taking account of credibility and objectivity
- ◆ produce a reasoned conclusion which expresses the candidate's view about a key geographical issue

The issue studied for this Unit should relate to one or more of the topics listed in Appendix 1.

---

### Administrative Information

**Superclass:** RF

**Publication date:** February 2008

**Source:** Scottish Qualifications Authority

**Version:** 02

© Scottish Qualifications Authority

This publication 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 specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50. (A handling charge of £1.95 will apply to all orders for priced items.)

## **National Unit Specification: general information (cont)**

**UNIT**                      Geographical Issues (Advanced Higher)

### **OUTCOMES**

- a) Identify and summarise viewpoints which deal with a key geographical issue.
- b) Critically evaluate viewpoints taken from different sources which deal with a key geographical issue.

### **RECOMMENDED ENTRY**

While entry is at the discretion of the centre, candidates will normally be expected to have attained one of the following or equivalent:

- ◆ the Course at Higher Geography
- ◆ one or more of the Units at Higher Geography
- ◆ the Course or Units in other social subjects at Higher or Advanced Higher level

### **CREDIT VALUE**

1 credit at Advanced Higher (8 SCQF credit points at SCQF level 7\*)

\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

### **CORE SKILLS**

There is no automatic certification of Core Skills or Core Skill components within this Unit.

## National Unit Specification: statement of standards

### UNIT Geographical Issues (Advanced Higher)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### OUTCOME 1

Identify and summarise viewpoints which deal with a key geographical issue.

##### Performance Criteria

- a) Objectively describe each viewpoint.
- b) Summarise each of the viewpoints with reference to all forms of information used in the presentation of the viewpoint.

#### OUTCOME 2

Critically evaluate viewpoints taken from different sources which deal with a key geographical issue.

##### Performance Criteria

- a) Make use of geographical terms, concepts and ideas appropriate to the issue being studied to show an understanding of the viewpoints.
- b) Describe the degree of objectivity of the sources in relation to the environmental issue by assessing the credibility and balance of the viewpoints.
- c) Reach a reasoned conclusion about which of the viewpoints considered to be the most compelling.

#### EVIDENCE REQUIREMENTS FOR THE UNIT

Candidates are required to produce a critical evaluation about a geographical issue. This should be produced under controlled and supervised conditions without the assistance of additional resources in a maximum of one hour. The critical evaluation will be based on sources containing differing viewpoints about a particular geographical issue. The issue will be related to topics in Appendix 1 of this Unit, namely:

- |               |                        |                                   |
|---------------|------------------------|-----------------------------------|
| ◆ Atmosphere  | ◆ Population Geography | ◆ Rural land resources            |
| ◆ Hydrosphere | ◆ Rural Geography      | ◆ Rural land degradation          |
| ◆ Lithosphere | ◆ Industrial Geography | ◆ River basin management          |
| ◆ Biosphere   | ◆ Urban Geography      | ◆ Urban change and its management |
|               |                        | ◆ European regional inequalities  |
|               |                        | ◆ Development and health          |

## **National Unit Specification: statement of standards**

### **UNIT      Geographical Issues (Advanced Higher)**

The viewpoints do not need to be radically different from each other or even necessarily opposed, but they should provide sufficient variation for candidates to write a critical evaluation.

The critical evaluation of viewpoints should contain:

- ◆ an objective description and summary of each viewpoint
- ◆ an evaluation, from a geographical perspective, which shows an understanding of each viewpoint
- ◆ a reasoned evaluation which balances the sources with each other taking account of credibility and objectivity
- ◆ a reasoned conclusion which expresses the candidate's view about which if any is considered to be the most compelling viewpoint

The standard to be applied is illustrated in the National Assessment Bank item available for this Unit. If a centre wishes to design its own assessment for this Unit, it should be of a comfortable standard.

## National Unit Specification: support notes

### UNIT Geographical Issues (Advanced Higher)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

#### GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is one of three mandatory Units which together make up the Course in Advanced Higher Geography. The other Units are the *Geographical Methods and Techniques* Unit and the *Geographical Study* Unit.

The issue studied in this Unit should relate to one or more of the topics listed in Appendix 1.

#### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Candidates are likely to be taking this Unit in a variety of circumstances:

- ◆ the critical evaluation essay will be completed as part of the Course
- ◆ the initial intention is to complete the critical evaluation essay but the final product is not produced
- ◆ the Unit is seen as an end point and the development of the skill of critical evaluation is restricted to sources and viewpoints provided

#### Learning experiences

##### Teaching order

Both Unit and Course assessment focus on the topics as listed in Appendix 1. The topics centres may choose to focus on in this Unit are, therefore both content and context free. Centres should base their teaching around one or more of these topics. The opportunity to use this content and context free, to the teaching of the skills required to produce a critical evaluation, may be taken by teachers/lecturers to extend the knowledge base of candidates in the selected areas of study. This extended knowledge should assist candidates to prepare for both the Unit and Course assessment of this Unit.

##### Methodology

The methodology used by teachers/lecturers will be built on existing good practice. Teacher/lecturer exposition and note-taking from textbooks, information sheets and a wide variety of other resources may form the basis of class work in this Unit. Individual and group discussion may reinforce this. This work might focus on one or more of the topics in the course arrangements at Higher. Beyond this, opportunities for extension work, gaining access to a variety of sources of information, fieldwork, independent reading and resource based learning should be made available, as appropriate, to individuals and groups. Independent learning may, instead of direct teacher/lecturer input, form the basis of a considerable part of the candidate's study time at Advanced Higher. Formal and informal group work could be used as an approach to learning where dialogue and interactions between candidates and between candidates and teachers/lecturers would be possible.

## National Unit Specification: support notes (cont)

### UNIT Geographical Issues (Advanced Higher)

Further advice on approaches to the teaching of this Unit is available in ‘*Geography: Flexible Learning Resource Pack (Advanced Higher)*’, ‘*Geographical Issues; Annotated Bibliographies: Advanced Higher*’ and ‘*Geographical Methods and Techniques: Statistical Awareness – Staff Briefing and Student Notes*’ produced by Learning and Teaching Scotland. These and other useful support materials are available on the website [www.LTScotland.org.uk/nq](http://www.LTScotland.org.uk/nq).

#### Skills and learning experiences

The development of skills of researching and producing critical evaluations of these viewpoints is a key aspect of this Unit. While the Unit Outcomes do not require candidates to carry out a full critical evaluation in which an essay is researched and produced, centres would be advised to ensure that candidates receive training as part of their learning experiences in all of the skills necessary for the production of such an essay. Teaching, therefore, should provide opportunities for candidates to receive advice on the sourcing of viewpoints, and the skills required to summarise and synthesize viewpoints. In addition to the skills of sourcing and summarising, advice should be given to candidates about structuring of critical evaluation essays and writing conclusions. It is recommended, therefore, that centres consider basing their teaching in this Unit around more than one issue or environmental interaction.

In planning the teaching of this Unit centres should ensure that the key skills and experiences referred to in the Unit summary and evidence requirements are built in to the work programme. Candidates should be:

- ◆ engaging in wide ranging independent reading relevant to their geographical issue
- ◆ making use of relevant terminology, and advanced skills, concepts and ideas
- ◆ collecting, extracting, interpreting, analysing and presenting geographical evidence
- ◆ gathering and systematically recording information derived from a variety of appropriate sources, such as maps, books, notes, graphs, statistics and audio visual materials
- ◆ aware of the type of information it is necessary to retain to write comprehensive bibliographies
- ◆ developing the skills of extended communication in the form of critical evaluations/essays; opportunities should be provided for revising and redrafting of extended writing following critical review
- ◆ taking part in formal and informal discussion and debate based on, and informed by, geographical evidence and knowledge, in order to develop the ability to think independently and make informed judgements
- ◆ developing individual and independent learning skills, especially those relating to the preparation and writing of a critical evaluation

Opportunities for extension, remediation and consolidation should be built into the Unit; how this is organised will depend on the teaching approach. Time should be allowed for remediation and revisiting of Unit assessments where Outcomes have not been achieved.

#### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

In order to achieve certification in this Unit, candidates are required to produce a critical evaluation which provides evidence of achievement of both Outcomes and related Performance Criteria. This critical evaluation will be completed under controlled conditions lasting a maximum of one hour. Centres may choose to use an instrument of assessment for this purpose provided in the NAB or may, if they wish, devise their own instruments of assessment. Where this happens centres are advised to seek prior moderation from SQA of the instrument of assessment they plan to use.

## National Unit Specification: support notes (cont)

### UNIT Geographical Issues (Advanced Higher)

In the assessment of the Unit candidates are provided (in the NAB) with sources containing viewpoints about an issue linked to topics listed in the Higher Geography Course Arrangements. The Outcomes of the Unit focus clearly on the ability of candidates to describe and critically evaluate these viewpoints. This, more than the candidates' own opinions about the issue, is the key element of the critical evaluation. As candidates work toward the point at which they should be able to demonstrate these skills, they should be developing some of the skills required to produce the critical evaluation essay required for the Course assessment. The additional skills of independently sourcing viewpoints, analysing these and writing more extended evaluations is likely to be developed at the same time.

Candidates are not required to show the full range of skills in Unit assessment that are required for Course assessment. A grid showing the differences between Unit and Course assessment demands is provided as part of the support notes in the Course Specification.

The Unit assessment for this Unit will take place within a period of 1 hour 15 minutes. It is expected, though not mandatory, that candidates will take up to 15 minutes of this time to absorb and reflect on the viewpoints with which they are presented. Within the remaining time candidates should be able to produce an evaluation which adequately shows their ability to meet all of the Performance Criteria of the Unit. Evaluations which are very brief are unlikely to meet these criteria but the brevity of an essay will not be considered as grounds for failing a candidate.

Where the candidate fails to provide evidence of satisfactory completion of an Outcome or Performance Criteria, he/she should, after discussion and remediation, have a further opportunity for reassessment. This can either take the form of a completely different assessment or a reworking of the failed Outcome/Performance Criteria.

For those centres studying this Unit as part of the Course, candidates should be selecting, with teacher/lecturer guidance, their own topic on which to carry out a critical evaluation of viewpoints contained in different sources. The candidate should then use the skills developed in preparation for the Unit assessment to write an extended essay maximum 12 A4 pages or equivalent which will be used for the Course Assessment to critically evaluate these sources and their viewpoints.

### **CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for this Course. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## **APPENDIX 1**

### **Geographical Issues**

The geographical issue(s) which are studied within this Unit should be related to the list of topics below. Any areal context is acceptable and the issue(s) chosen can exhibit elements of more than one of the specified environmental interactions. Opportunities should be taken throughout to emphasize the linkages between physical and human geography and the holistic nature of the subject. Through the study of a geographical issue(s) this Unit requires candidates to identify, summarise, synthesise and evaluate viewpoints from different sources.

An expanded list of these topics is provided below.

#### **Atmosphere**

The characteristics of the atmosphere vary spatially and provide climate and weather conditions which interlink with other systems.

#### **Hydrosphere**

The water cycle, which constitutes a major physical system, operates on a variety of scales. On the Earth's surface, the movement of water is a major agent in the formation of landforms and landscapes.

#### **Lithosphere**

The lithosphere displays a range of landforms and patterns which can be explained by reference to a variety of processes on different scales.

#### **Biosphere**

Soils and vegetation can be viewed as ecosystems, which are a set of interacting components.

#### **Population geography**

Population change and structure vary spatially and over time. The reasons for change are complex and involve human and environmental factors.

#### **Rural geography**

Rural populations are involved in a variety of agricultural systems. These systems and associated landscapes are subject to change.

#### **Industrial geography**

Areas of industrial concentration contain a range of manufacturing and other economic activities. These concentrations develop and change spatially over time. This section should be studied with reference to one or more industrial concentrations within the European Union.

#### **Urban geography**

Urban settlements provide a range of employment, services and residential opportunities which may be located in different parts of the settlement. This section should be studied with reference to one large urban concentration from an EMDC.

#### **Rural land resources**

Rural land resources are the product of the interaction of a wide range of physical factors modified by human activity. The resultant rural landscapes offer a variety of physical, economic and social opportunities.

## **APPENDIX 1(cont)**

### **Rural land degradation**

Rural land resources are subject to degradation, which may be the result of natural processes, human activity, or a combination of both. The decline in land productivity and other consequences of land degradation have direct social and economic consequences and have led to the development of soil conservation and land management strategies.

### **River basin management**

Within river basins, water control projects are undertaken for a variety of reasons and on a range of scales. These projects are examples of human interference with systems, especially hydrological systems. The changes often have both beneficial and adverse consequences.

### **Urban change and its management**

Large urban concentrations are characteristic of many countries. The urban environment of these concentrations changes in response to a wide range of environmental, social, economic, technological and political factors.

### **European regional inequalities**

Regional inequalities on a variety of scales are a feature of the contemporary world. There is a variety of physical, social, and economic reasons for these spatial disparities. Within the European Union, policies are developed at national and international levels to reduce inequalities.

### **Development and health**

Inequality of social and economic development is a major feature of the contemporary world. It exists on various scales and is measurable in several ways. Levels of health and the incidence of disease are major indicators of levels of development. Such indicators may be explained geographically by reference to a variety of interacting processes.