

## SQA Advanced Unit specification

### General information for centres

**Unit title:** Resource Economics

**Unit code:** HR2T 48

**Unit purpose:** This Unit considers the use of natural resources and subsequent environmental and sustainability issues. The economics of how scarce resources are allocated, and how to ensure that any related environmental costs are reflected in the cost of subsequent goods and services, are also addressed.

On completion of the Unit the candidate should be able to:

- 1 Evaluate the acquisition of natural resources and the political economy of resource use.
- 2 Within the context of natural resource use, explain the concept of market failure and correctly identify and evaluate the instruments available to mitigate and/or correct for market failure in resource use.
- 3 Critically appraise the concept of sustainable development and how natural resources can be sustainably utilised through appropriate policies.

**Credit points and level:** 1 SQA Credit at SCQF level 8: (8 SCQF credit points at SCQF level 8\*)

*\*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 National 1 to Doctorates.*

**Recommended prior knowledge and skills:** Access to this unit is at the discretion of the centre. No specific pre-requisite courses are mandatory, however a general introduction to economic concepts such as Economic Issues: an Introduction (HP6T 47) could be useful.

**Core Skills:** There are opportunities to develop the Core Skills of *Problem Solving* and *Communication* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

**Context for delivery:** If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

**Assessment:** This Unit could be assessed by a combination of in-class assessments and extended-response written assessments.

## **SQA Advanced Unit specification: statement of standards**

**Unit title:** Resource Economics

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### **Outcome 1**

Evaluate the acquisition of natural resources and the political economy of resource use

#### **Knowledge and/or Skills**

- ◆ Acquisition of natural resources
- ◆ Political economy of natural resource use

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ explain the processes involved in acquiring three natural resources
- ◆ evaluate the contribution of natural resource acquisition and use to economic development with respect to two practical studies: one historic and one present day

#### **Assessment Guidelines**

This Outcome could be assessed by an in-class group presentation of two short case-studies

### **Outcome 2**

Within the context of natural resource use, explain the concept of market failure and correctly identify and evaluate the instruments available to mitigate and/or correct for market failure in resource use.

#### **Knowledge and/or Skills**

- ◆ Private and Social costs
- ◆ Private and Social benefits
- ◆ Market failure
- ◆ Externalities and internalisation
- ◆ Market-based instruments, including taxes and trading schemes
- ◆ ‘Command and control’ measures for pollution reduction

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ Explain the concepts of private and social costs
- ◆ Explain the concepts of private and social benefits

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- ◆ Explain what is meant by market failure
- ◆ Explain the nature of externalities, in production and consumption, and how such externalities could be internalised
- ◆ Evaluate the use of two market-based instruments to control pollution (one each of taxes and trading schemes)
- ◆ Assess how command and control measures may be used to control two specific pollution threats

### **Assessment Guidelines**

This Outcome could be assessed by an extended response open book assessment, consisting of a series of structured questions, submitted in report format, of approximately 1,200–1,500 words.

## **Outcome 3**

Critically appraise the concept of sustainable development and how natural resources can be sustainably utilised through appropriate policies

### **Knowledge and/or Skills**

- ◆ Sustainable Development.
- ◆ Sustainable exploitation of resources
- ◆ Economic Policies

### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ critically appraise two definitions of sustainable development
- ◆ explain the concept of sustainable resource exploitation
- ◆ critically evaluate two economic policies designed to make resource use more sustainable

### **Assessment Guidelines**

This Outcome could be assessed by a short essay, of approximately 1,200–1,500 words, where candidates evaluate two definitions of sustainable development and show their understanding of two relevant economic policies.

## Administrative Information

**Unit code:** HR2T 48

**Unit title:** Resource Economics

**Superclass category:** EB

**Original date of publication:** August 2017

**Version:** 01

### History of changes:

Version	Description of change	Date

**Source:** SQA

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## **SQA Advanced Unit specification: support notes**

### **Unit title:** Resource Economics

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 provides candidates with the knowledge to apply basic economic concepts to issues of natural resource use. It aims to explain the basic economic concepts that enable the measurement of natural resource use and explore how natural resources can be sustainably used.

This Unit will probably be based on classroom, tutorial and real life case study situations. Case studies will reinforce the information given in lectures or gained by other methods by the candidate. The unit will begin by showing how the value of resources to the individual and society can be measured. This will be illustrated with reference to examples from forestry, countryside management and other industries. A second aspect of the unit will address issues relating to the sustainable exploitation of natural resources. Examples from forestry, fisheries and mineral extraction industries will be utilised to examine these concepts. The unit will also use data from both individual firm and national accounts to examine how exploitation of the environment may be accounted for.

#### **Outcome 1**

Nature and use of natural resources in economic development could be considered with the use of historical and contemporary case studies. These cases could be used to consider the nature of private and social costs of resource extraction and the private and social benefits of resource use.

#### **Outcome 2**

The concept of market failure could be used to explore the nature of public goods and externalities. A range of policies measures for pollution reduction can be considered: internalisation, taxes and trading schemes and 'Command and control'.

#### **Outcome 3**

Candidates should be given readings on various definitions of sustainability and their implications for resource use. Case Studies could be used to demonstrate how natural resources could be sustainably used.

These case studies could be of particular resources and/or of particular economies and could consider the difficulties in defining and reaching sustainability in resource use (both renewable and non-renewable) and achieving sustainability in the stock of renewable and non-renewable resources.

### **Guidance on the delivery and assessment of this Unit**

Emphasis will be placed on interactive tutorials and case studies to allow the candidate to apply principles and techniques where appropriate, and on the candidate discovering relevant material

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for themselves through reading, library and other relevant information sources. Emphasis will also be placed on candidates being able to generate written evidence with clear and concise use of English.

Instruments of assessment which are considered by tutors/trainers to be the most appropriate may be used. Where necessary (for example for candidate presentations) direct observation of a candidate's performance should be supported by evidence of assessment. Integration of assessments covering different outcomes is encouraged.

Essays where candidates are asked to show their understanding of concepts and policies in extended response open book assessment could be used. Responses can be guided by the use of a series of directed questions with individual word limits. Candidates can then use a combination of class discussion, presentations, individual research and directed reading to generate evidence.

### *Opportunities for developing Core Skills*

There are opportunities to develop the Core Skill(s) of *Problem Solving* and *Communication* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components. These Core Skills may be developed through group work required to achieve Outcome 1, and through generating written assessments for Outcomes 2 and 3.

## **Open learning**

If this Unit is delivered by open or distance learning methods, additional planning resources may be required for candidate support, assessment and quality assurance.

A combination of new and traditional authentication tools may have to be devised for assessment and re-assessment purposes.

## **Equality and inclusion**

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## General information for candidates

### Unit title: Resource Economics

Natural resources have been exploited for many years for individual profit and to increase social welfare. This Unit will teach you methods governments might employ to encourage the responsible acquisition and use of resources, and discourage over-exploitation and practices leading to undesirable levels of pollution. You will learn about the use of taxes, subsidies, pollution trading schemes and regulation – and how these can be administered to achieve desirable outcomes for society. The Unit also looks at definitions of sustainable development and what they really represent in terms of future resource levels and limitations on current use.

There are opportunities to develop the Core Skills of *Problem Solving* and *Communication* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.