



**HOME ECONOMICS:  
HEALTH AND FOOD TECHNOLOGY**  
Advanced Higher

**Sixth edition – published August 2011**



**NOTE OF CHANGES TO ARRANGEMENTS  
SIXTH EDITION PUBLISHED AUGUST 2011**

**COURSE TITLE:** Home Economics: Health and Food Technology  
(Advanced Higher)

**COURSE NUMBER:** C118 13

**National Course Specification**

Course details:

- ◆ Food Politics-Food, nutrition and health issues/policies updated
- ◆ Suggested Course content websites updated

**National Unit Specification**

All Units No change.



## National Course Specification: general information (cont)

**COURSE** Home Economics: Health and Food Technology  
(Advanced Higher)

### RECOMMENDED ENTRY

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

- Higher in Home Economics
- Higher Units in Home Economics
- a Course or Units at Higher level in a related subject area

The course is also suitable for 'new starts' or adult returners with relevant prior experience.

### CORE SKILLS

This course gives automatic certification of the following:

**Complete core skills for the Course** Problem Solving (H)

**Additional core skills components for the Course** None

For information about the automatic certification of core skills for any individual Unit in this Course, please refer to the General Information section at the beginning of the Unit.

Additional information about core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

## **National Course Specification: Course details**

**COURSE** Home Economics: Health and Food Technology  
(Advanced Higher)

### **RATIONALE**

A more detailed rationale for the study of Home Economics in each of the three contexts can be found in the Course details for Higher Home Economics.

The Advanced Higher Home Economics Course has been designed to articulate with and provide a progression from Higher Home Economics. The Course aims to provide a challenging experience for those who wish to study one of the contexts of the subject in greater depth. Candidates will be required to:

- select and apply knowledge and skills to a range of complex problems
- communicate accurate information
- implement planned strategies to solve complex problems
- review strategies
- make critical appraisals

Increased emphasis is placed on the development of independent study skills and objective thinking. The development of these skills and abilities at Advanced Higher provides candidates with a sound base from which to pursue further studies and employment opportunities.

The dynamic nature of Home Economics (AH) should foster an interest in current developments in technology and in the influence their application has on individuals, families and society. Home Economics (AH) provides candidates with a high level of the technological capability and personal effectiveness required in a society which is becoming increasingly dependent upon technology.

As a result of following Home Economics (AH) candidates should be able to:

- acquire a deeper knowledge and understanding of the factors which influence some of the choices and decisions made by individuals, families and societies
- apply skills of enquiry, analysis and evaluation through the study of materials and resources
- apply management skills necessary for the effective use of materials and resources
- use a critical approach to respond to problems relating to social and technological change and environmental issues
- develop all four aspects of technological capability
- further develop personal effectiveness and a positive attitude towards independent learning

## National Course Specification: Course details (cont)

### COURSE CONTENT

Context: Health and Food Technology at Advanced Higher

#### Resource Management

When delivering the Course content, it is good practice to use a variety of teaching methods. A greater degree of emphasis should be placed on independent learning which encourages additional research and reading. To develop a deeper knowledge and understanding of the Course content, candidates must access current information from credible sources.

CONTENT	ELABORATION
Candidates should be able to demonstrate knowledge and understanding when proposing solutions to problems concerning:	
The food chain	<p>The process of events from production of food through to its consumption to include:</p> <ul style="list-style-type: none"> <li>◆ Food hygiene and safety issues at each stage in the food chain — primary producers, primary/initial processing, final/secondary processing or manufacturing, transportation, retailer, consumer to include:               <ul style="list-style-type: none"> <li>— types of bacteria and possible sources which may increase the risk of food poisoning within the food chain</li> <li>— control and prevention of microbial growth through out the food chain</li> <li>— current Food Safety Legislation</li> <li>— the Hazard Analysis Critical Control Point system</li> <li>— the role of the Environmental Health Department</li> </ul> </li> <li>◆ Product design and quality to include:               <ul style="list-style-type: none"> <li>— market research (reasons for use, benefits to manufacturer, methods of obtaining data)</li> <li>— stages in product development (concept generation, concept screening, development of prototype, product testing, packaging design, first production run, marketing plan, product launch)</li> <li>— quality assurance and quality control</li> <li>— use of computer technology in food production</li> </ul> </li> </ul>

<b>CONTENT</b>	<b>ELABORATION</b>
Food politics	<ul style="list-style-type: none"> <li>◆ EU Directives</li> <li>◆ The role of the Food Standards Agency</li> <li>◆ The role of DEFRA</li> <li>◆ Food, nutrition and health issues/policies in Scotland and in the UK — current reports should be accessed, eg Hungry for Success, Eating for Health — meeting the Challenge, Healthy Active Living, Schools Health Promotion and Nutrition Act, Preventing Overweight and Obesity in Scotland: A Route Map towards Healthy Weight</li> <li>◆ The impact of nutritional/health, cultural, social, economic, and environmental factors (eg Fair Trade) on food availability, selection and consumption patterns</li> <li>◆ Nutritional Guidance for Early Years, Recipe for Success-Scotland’s National Food and Drinks Policy</li> </ul>
Food science The chemical structure of the main nutrients	<p>The chemical structure of:</p> <ul style="list-style-type: none"> <li>◆ Carbohydrates (sugar, starch, Non Starch Polysaccharides ) — monosaccharides, disaccharides and polysaccharides</li> <li>◆ Fats and oils — fatty acids and glycerol; unsaturated, monounsaturated, polyunsaturated; essential fatty acids; trans and cis fatty acids</li> <li>◆ Proteins — amino acids</li> </ul>
Food science. The nature of food constituents in relation to their properties and uses in food manufacture	<p>The properties and uses of:</p> <ul style="list-style-type: none"> <li>◆ Carbohydrates — solubility, inversion, crystallisation, caramelisation, retrogradation of starch, pectin gel formation</li> <li>◆ Fats and oils — melting characteristics, plasticity related to creaming and shortening properties, hydrogenation of oils, smoke point related to uses as a cooking medium, colloidal systems, emulsifying agents and stabilisers, hydrolytic and oxidative rancidity</li> <li>◆ Proteins — colloidal systems, denaturation and factors affecting it, gels and gelatine, maillard reaction</li> </ul>

## National Course Specification: Course details (cont)

CONTENT	ELABORATION
<p>Nutrients and their effect on the health and development of individuals</p>	<p>In depth study of nutrients, their function and the effect on the health and development of individuals at different life stages/special circumstances — pregnancy and lactation, infants/young children, teenagers, adults, elderly, vegetarians, weight reduction, sports performance:</p> <ul style="list-style-type: none"> <li>◆ Main nutrients — protein, fats and carbohydrates — functions and effect on health and development</li> <li>◆ Micronutrients — functions and effect on health and development</li> <li>◆ Anti-oxidants — role in health</li> <li>◆ Inter-relationship of nutrients</li> <li>◆ Factors affecting absorption of nutrients</li> </ul> <p>Health and dietary diseases — coronary heart disease, obesity, hypertension, cancer, diabetes, anaemia, bowel disorders, osteomalacia, osteoporosis, dental decay</p>
<p>Food commodities</p>	<p>Composition and properties of the following goods in raw and cooked state:</p> <ul style="list-style-type: none"> <li>◆ Fruit and vegetables - structure and texture, changes during ripening and cooking, plant pigments and enzymic browning, sensory qualities, relationship to health</li> <li>◆ Meat and fish - structure and texture, post-mortem changes, changes during cooking, meat and fish colour, meat tenderness, sensory qualities, relationship to health</li> <li>◆ Dairy foods, milk and milk products and eggs - constituents, uses in food preparation, changes during cooking, sensory qualities, relationship to health</li> <li>◆ Cereals and baked goods - types, function and uses of: rice and pasta, flour, fats and shortenings, sugar, raising agents; changes during cooking, sensory qualities and their relationship to health</li> </ul>

## National Course Specification: Course details (cont)

CONTENT	ELABORATION
Biochemistry, preservation and processing	<ul style="list-style-type: none"> <li>◆ The role of micro-organisms and enzymes in the development of flavours and textures in food</li> <li>◆ Beneficial effects of micro-organisms and enzymes related to specific foodstuffs: cheese, yoghurt, alcoholic drinks, bread</li> <li>◆ Adverse effects of micro-organisms and enzymes in the development of flavours and textures in foods</li> <li>◆ Physical and chemical changes in foodstuffs after preservation affecting structure, texture, colour and nutritive value</li> <li>◆ Food additives - preservatives, anti-oxidants, emulsifiers, improvers, specific commercial additives ie, anti-foaming agents, colours, bleaches, flavour enhancers, nutritional additives</li> <li>◆ The benefits of additives and safeguards regarding their use.</li> <li>◆ Organic foods</li> <li>◆ Genetic modification</li> <li>◆ Food irradiation</li> <li>◆ Functional foods(health promoting food)</li> <li>◆ Fast foods – reasons for the growth of the fast food industry               <ul style="list-style-type: none"> <li>– role of technology</li> <li>– impact of fast food on food habits</li> <li>– in a social context eg schools, hospitals</li> </ul> </li> </ul>
Psychology of food	<ul style="list-style-type: none"> <li>◆ Influence on food development</li> <li>◆ Influence on consumers</li> <li>◆ Consumer attitudes to food issues</li> <li>◆ Role/impact of the media</li> <li>◆ Consumer behaviour</li> </ul>

## **Advanced Higher Health and Food Technology**

**Some suggested websites are provided below that cover Course content**

Food Standards Agency  
DEFRA

[www.food.gov.uk](http://www.food.gov.uk)  
[www.defra.gov.uk](http://www.defra.gov.uk)

Current nutritional issues/reports: Scottish Executive

[www.scotland.gov.uk](http://www.scotland.gov.uk)

Current nutritional issues/reports: Food Standards Agency

[www.food.gov.uk](http://www.food.gov.uk)

Fair Trade products

[www.fairtrade.org.uk](http://www.fairtrade.org.uk)  
[www.fairtrade.org.uk/products.htm](http://www.fairtrade.org.uk/products.htm)  
[www.fairtradefederation.com](http://www.fairtradefederation.com)

Food and nutrition

<http://www.bda.uk.com>  
[www.eufic.org](http://www.eufic.org)

Functional foods  
Organic food

[www.nutrition.org.uk](http://www.nutrition.org.uk)  
[www.organicconsumers.org](http://www.organicconsumers.org)  
[www.soilassociation.org](http://www.soilassociation.org)

Genetic modification

[www.foodfuture.org.uk](http://www.foodfuture.org.uk)

**Candidates are also advised to use the internet for independent research**

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

### **COURSE**                      Home Economics: Health and Food Technology (Advanced Higher)

The benefit of taking component Units as part of a Course award is that it allows integration of teaching which can be achieved in a variety of imaginative ways. Classroom activities chosen to deliver Course content should match the needs and abilities of the candidates and enable them to:

- develop and practise the skills identified in the rationale
- develop the transferable skills of enquiry, analysis and evaluation
- extend their knowledge base

Such activities will prepare candidates for external assessment by enabling them to achieve at levels beyond that required to demonstrate competence for each of the Unit outcomes, leading them towards technological capability demonstrated within the externally assessed assignment. For example, candidates could be asked to consider a problem from a number of different perspectives or in unfamiliar situations. Teachers/lecturers should make candidates aware of the integration between the knowledge and skills of the component Units.

The Course provides scope for high levels of achievement in the four aspects of technological capability. Candidates also have opportunities to develop management skills for a range of applications, as well as independence as learners.

### **ASSESSMENT**

To gain the award of the Course, the candidate must pass the Unit assessments as well as the external assessment. External assessment will provide the basis for grading attainment in the Course award.

When Units are taken as component parts of a Course, candidates will have the opportunity to achieve at levels beyond that required to attain each of the Unit outcomes. This attainment may, where appropriate, be recorded and used to contribute towards Course estimates, and to provide evidence for appeals. Additional details are provided, where appropriate, with the exemplar assessment materials. Further information on the key principles of assessment are provided in the paper, *Assessment*, published by HSDU in May 1996.

### **DETAILS OF THE INSTRUMENTS FOR EXTERNAL ASSESSMENT**

External Course assessment will consist of a question paper and a dissertation. The dissertation will be on either a research project or an industrial placement and will total 100 marks.

The question paper will be of two hours 20 minutes duration and total 100 marks. Structured-response and extended-response questions will be used. There will be an element of choice within the written paper. It will assess the candidate's ability to:

- select and apply knowledge to a range of complex problems or situations
- make critical appraisals and reasoned decisions, which involve using skills of analysis and evaluation

## National Course Specification: Course details (cont)

### **COURSE** Home Economics: Health and Food Technology (Advanced Higher)

The question paper will consist of two sections:

Section A will be a compulsory section consisting of one question worth 25 marks. This will be a structured response question.

Section B will consist of six questions, from which the candidate will select three. Each question will be worth 25 marks. This section will consist of extended response questions.

Topics for the research project or the industrial placement should be derived by the candidate from the Course content in the context for study at either Higher or Advanced Higher level. Examples of suitable topics will be available. Guidance will be provided on specifications for the research project and the industrial placement, and on the resulting dissertation. Candidates should undertake the research project or industrial placement in 40 hours. The resulting dissertation will be submitted for external assessment. It will be the responsibility of the centre to establish suitable industrial links.

Teachers/lecturers may offer guidance in both instances by giving:

- advice on source information, persons or establishments that may be able to help
- assistance with planning for deadlines
- advice on the suitability and practicability of candidates' suggestions

### **GRADE DESCRIPTIONS**

Course assessment will be external and will sample across the outcomes of the component Units. The grade descriptions for Course assessment will relate to the performance criteria for internal assessment but will also place additional demands on candidates by testing their ability to: integrate knowledge and skills acquired across the component Units; retain knowledge and skill levels over a longer period of time; apply knowledge and skills in more challenging ways, for example, in less familiar contexts.

The grade descriptions on their own are unlikely to provide a tool for making judgements. They will require to be augmented by the exemplar assessment materials available on the SQA website: [www.sqa.org.uk](http://www.sqa.org.uk) > NQ Home Economics > Understanding Standards.

#### **GRADE DESCRIPTIONS AT 'C'**

Candidates can:  
select and apply knowledge and understanding of facts, terminology, concepts, and principles to a range of technological and other problems, some of which are complex, providing detailed accurate explanations;

communicate accurate information or data, acquired as a result of investigation, from some unfamiliar resources, using a variety of presentation methods;

#### **GRADE DESCRIPTIONS AT 'A'**

Candidates can:  
select and apply knowledge and understanding of facts, terminology, concepts, and principles to a range of technological and other problems, most of which are complex, providing very detailed accurate explanations;

communicate detailed accurate information or data, acquired as a result of investigation, from a range of unfamiliar resources, using a variety of presentation methods, some of which are complex;

## National Course Specification: Course details (cont)

**COURSE** Home Economics: Health and Food Technology  
(Advanced Higher)

### GRADE DESCRIPTIONS AT ‘C’

devise and implement a strategy to solve a complex problem, showing some evidence of reviewing the strategy and taking some account of the personal qualities and preferences of those involved;

make a critical appraisal of the process and solutions of a complex technological problem against criteria defined by the candidate, providing accurate explanations and making appropriate recommendations.

### GRADE DESCRIPTIONS AT ‘A’

devise and implement a strategy to solve a complex problem, showing evidence of consistently reviewing the strategy and taking full account of the personal qualities and preferences of those involved;

make a critical appraisal of the process and solutions of a complex technological problem against criteria defined by the candidate, providing detailed accurate explanations and making appropriate recommendations.

## APPROACHES TO LEARNING AND TEACHING

Approaches should be chosen to enhance learning experiences so that candidates achieve their full potential whether working in a whole-class, small group or supported self-study situation. When delivering the Course content, account should be taken of prior knowledge that candidates may have. An integrated approach to learning and teaching across the component Units of Resource Management and Practical Research and Dissertation is recommended.

It is good practice to use a variety of methods so that candidates’ interest and motivation are maintained and individual preferences for different learning styles are considered. Teachers/lecturers will need to ensure an appropriate balance between teacher/lecturer-directed approaches and candidate-centred activities. A greater degree of emphasis should be placed on independent learning, but it may be more appropriate to use a teacher/lecturer-directed approach to introduce a new concept.

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning and assessment. The nature of a candidate’s special needs should be taken into account when planning learning experiences and selecting assessment instruments.

Knowledge and understanding of facts, terminology, concepts and principles will be developed through a process-based approach to learning, making full use of available resources. The use of specialist craft skills is recommended for a range of purposes, such as investigation, illustration or presentation of knowledge, or for the manufacture of a product. Teacher/lecturer-led discussion should provide opportunities for candidates to communicate ideas and put forward arguments about issues within a particular area of study related to the chosen context. These suggested approaches will encourage consolidation of knowledge and understanding.

## National Course Specification: Course details (cont)

### **COURSE** Home Economics: Health and Food Technology (Advanced Higher)

The Practical Research and Dissertation unit allows candidates freedom to pursue their own interests and provides a valuable exercise in self-motivation, organisation and confidence building. There should be opportunities for candidates to extend their skills and knowledge beyond that required for achievement of Unit outcomes, leading them towards technological capability which they will demonstrate within the externally assessed dissertation.

The relationship between learning experiences and applications in industry should be emphasised to provide real contexts for learning and realistic problems to solve. These opportunities will increase the self esteem, confidence and motivation of candidates and improve their insight into the needs of industry and the skills required for those entering the job market. An industrial link is an excellent way of promoting understanding of how industry works and the standards which apply. This understanding can then be mirrored in classroom activity by, for example, candidates displaying a responsible attitude to health and safety. Entrepreneurial activities provide an exciting and challenging opportunity for learning and are greatly enhanced when they are related to industrial links.

It will be important to ensure from the outset that candidates are familiar with Unit outcomes and Course grade descriptions.

#### **Use of the additional 40 hours**

The additional 40 hours of flexible time should be integrated into the Course design for use at important stages of delivery.

<b>Stage</b>	<b>Explanation</b>
Candidate induction	familiarisation with the aims and design of the Course
	familiarisation with the requirements of internal assessment for the Units and external assessment of the Course
	setting target deadlines for the Units, Course and assessment
	presentation of work, for example, the requirement for tabulation and bullet points to reduce extensive text when answering examination questions
	candidate commitment to meet the demands and deadlines of the Course
Dissertation	time to complete the dissertation resulting from the research project or placement report will be taken from the additional 40 hours, and from time available within the component Units. For example, a number of outcomes in the component Units can be achieved when candidates undertake either the research project or industrial placement

## National Course Specification: Course details (cont)

### COURSE Home Economics: Health and Food Technology (Advanced Higher)

Stage	Explanation
Preparation for external assessment	<p>External Course assessment will place additional demands on candidates requiring them to:</p> <ul style="list-style-type: none"><li>• demonstrate the ability to integrate knowledge, understanding and skills acquired in component Units</li><li>• retain knowledge and skill levels over a longer period of time</li><li>• apply knowledge and skills in less familiar or more complex contexts</li></ul> <p>Candidates, therefore, will require time and appropriate experiences to permit them to develop and demonstrate these additional requirements. These experiences should include:</p> <ul style="list-style-type: none"><li>• consolidation and revision of knowledge and skills identified in the rationale</li><li>• practice in external assessment examination techniques</li><li>• opportunities to achieve at levels beyond that required to demonstrate competence in each of the Unit outcomes</li></ul>

### SPECIAL NEEDS

This course specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).

### SUBJECT GUIDES

A Subject Guide to accompany the Arrangements documents has been produced by the Higher Still Development Unit (HSDU) in partnership with the Scottish Consultative Council on the Curriculum (SCCC) and Scottish Further Education Unit (SFEU). The Guide provides further advice and information about:

- support materials for each Course
- learning and teaching approaches in addition to the information provided in the Arrangements document
- assessment
- ensuring appropriate access for candidates with special educational needs

The Subject Guide is intended to support the information contained in the Arrangements document. The SQA Arrangements documents contain the standards against which candidates are assessed.



## National Unit Specification: general information

<b>UNIT</b>	Health and Food Technology: Resource Management (Advanced Higher)
<b>NUMBER</b>	D271 13 (Home Economics – Health and Food Technology)
<b>COURSE</b>	Home Economics: Health and Food Technology (Advanced Higher)

### SUMMARY

At the end of this Unit, candidates will be able to communicate relevant information or advice as a result of applying knowledge and understanding to address complex problems. They will be able to demonstrate technological capability by the use of appropriate skills and techniques to solve a problem and they will be able to give justification for recommendations made.

### OUTCOMES

- 1 Apply specialist knowledge and understanding of facts, terminology, concepts and principles to address complex issues, situations or problems.
- 2 Use appropriate technological skills and techniques to solve a complex problem.
- 3 Select and analyse recent information relating to a context of study in Home Economics.

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#### Administrative Information

<b>Superclass:</b>	NH
<b>Publication date:</b>	September 2006
<b>Source:</b>	Scottish Qualifications Authority
<b>Version:</b>	03

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Additional copies of this unit specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50 (minimum order £5).

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

**UNIT** Health and Food Technology:  
Resource Management (Advanced Higher)

### **RECOMMENDED ENTRY**

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

- Higher in Home Economics
- Higher Units in Home Economics
- a Course or Units at Higher level in a related subject area

This Unit is also suitable for ‘new starts’ or adult returners with relevant prior experience.

### **CREDIT VALUE**

2 credits at Advanced Higher.

### **CORE SKILLS**

This Unit gives automatic certification of the following:

**Complete core skills for the Unit** Problem Solving (H)

**Additional core skills components for the Unit** None

Additional information about core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

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

### **UNIT**                      **Health and Food Technology: Resource Management (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**

Apply specialist knowledge and understanding of facts, terminology, concepts and principles to address complex issues, situations or problems.

##### **Performance criteria**

- (a) The issue, situation, or problem identified is relevant, appropriate to the Unit content and reflects an awareness of topical issues within the subject area.
- (b) The main factors relevant to the issue, situation or problem are identified accurately and detailed explanation is provided.
- (c) Appropriate knowledge is applied, giving detailed, accurate explanations to address the issue, situation or problem.
- (d) Critical appraisal relates closely to the most suitable way of addressing the issue, situation or problem.
- (e) Relevant information or advice is communicated effectively, with due sense of audience.

##### **Evidence requirements**

For Outcome 1 PC (a) - PC (e) evidence in the form of a report or a presentation of approximately 1000 words, based on the performance criteria specified above.

Specific advice:

- (a) Candidates will select an area of study from the Unit content which will enable them to address an issue, situation or problem. Guidance should be given to suitability of the issue, situation or problem selected and to the identification of a possible target group.
- (b) The main factors will include issues and constraints arising from the issue, situation or problem.
- (c) Evidence must be provided to show that the candidate can select and use knowledge and understanding of the issue, situation or problem, giving relevant detail in explanations and arguments.
- (d) Ways of addressing the issue, situation or problem might include: giving advice, making an evaluation, comparing and or contrasting or drawing conclusions.
- (e) The target audience should be considered when identifying ways of communicating relevant information or advice.

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

**UNIT** Health and Food Technology:  
Resource Management (Advanced Higher)

### OUTCOME 2

Use appropriate technological skills and techniques to solve a complex problem.

#### Performance criteria

- (a) The analysis of the problem reflects aspects of technological perspective and/or sensitivity.
- (b) The skills and techniques chosen to solve the problem are appropriate to the purpose, and reflect an understanding of facts, concepts, terminology and principles.
- (c) The plan at each stage demonstrates an understanding of, and is responsive to, the constraints of time, resources and skill level.
- (d) The critical appraisal of the process and solution relate closely to key aspects of the original problem.
- (e) Recommendations are relevant and supported by detailed justification.

#### Evidence requirements

For Outcome 2 PC (a) - PC (e) evidence in the form of a design activity, based on the performance criteria specified above.

Specific advice:

A design brief will be issued to the candidate. The design brief should be devised to reflect aspects related to technological perspective and/or technological sensitivity. (Aspects of technological perspective and sensitivity are identified in *A Framework for Technology Education in Scottish Schools: A Statement of Position* (Scottish CCC, 1996).

- (a) The analysis of the problem will reflect aspects or technological perspective and/or sensitivity in the context of the design brief.
- (b) Skills and techniques can be identified as the investigative procedures necessary to obtain accurate, reliable and valid information; for example, scientific experiments, sensory evaluations, comparative testing, literary search. The results from these investigations will lead to a solution(s).
- (c) The plan, if appropriate, will be adapted accordingly to accommodate changes, for example: new findings or ideas; failure to meet deadlines or meeting deadlines early; problems relating to accessing source materials. The plan must direct the reader through the problem solving process (including manufacture if appropriate).
- (d) Critical appraisal will involve the candidate: assessing the suitability of the solution(s); giving critical comment on the suitability of the skills and techniques used, and the changes made to the plan. If appropriate, such comments will be linked to the key aspects identified in the initial stages. Critical appraisal will enable a candidate to formulate recommendations.
- (e) The recommendations will propose a way forward. Where appropriate this will include further areas to investigate; comment on adaptations to solutions and processes and comment on crucial factors to be considered before further advice/solutions can be given.

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

**UNIT** Health and Food Technology:  
Resource Management (Advanced Higher)

### **OUTCOME 3**

Select and analyse recent information relating to a context of study in Home Economics.

#### **Performance criteria**

- (a) The information is selected from a variety of primary and secondary sources.
- (b) The detailed analysis of an issue draws effectively on relevant information and sources to provide a valid set of research questions.
- (c) The explanations of different views and interpretations of an issue are fair, balanced and supported by evidence.
- (d) A personal stance on an issue is supported by detailed, referenced justification.

#### **Evidence requirements**

For Outcome 3 PC (a) - PC (d) evidence in the form of a report of approximately 750 words, based on the performance criteria specified above.

Specific advice:

Evidence should be provided to show that each of the performance criteria have been met on one occasion. The source information should be current and should be of a scientific, technological or sociological nature and related to the appropriate context to be studied, for example issues relating to food or the food industry; textile and the textile industry or the welfare of the family.

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

### **UNIT**                      Health and Food Technology: Resource Management (Advanced Higher)

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

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

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

The content on which this Unit is based is listed in the Course details for Home Economics (AH).

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

This Unit can be delivered concurrently with Practical Research and Dissertation to form the component Units of Advanced Higher Home Economics in **one** context of study. Generation of evidence can be achieved by integrating outcomes.

An integrated delivery of the outcomes is recommended. In order to avoid a cumbersome approach to assessment, appropriate performance criteria from each outcome which can be achieved in one activity should be identified.

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

The choice of assessment will depend, to a large extent, on how the Unit is delivered, for example, whether it is delivered as a component of a Course or as a free-standing Unit. While it is possible to devise assessment instruments for each of the Unit outcomes, it is preferable and more manageable to devise one or two which encompass more than one outcome. The following examples illustrate this.

#### ***Outcomes 1 - 3***

May be assessed on their own at various stages of learning or, may be integrated using a problem-solving exercise which is complex. However, for summative purposes assessment is best carried out towards the end of the Unit.

### **SPECIAL NEEDS**

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).



## National Unit Specification: general information

<b>UNIT</b>	Health and Food Technology: Practical Research and Dissertation (Advanced Higher)
<b>NUMBER</b>	D0F5 13
<b>COURSE</b>	Home Economics: Health and Food Technology (Advanced Higher)

### SUMMARY

This Unit will allow the candidate to carry out independent, practical research within a research project or industrial placement. The candidate will further develop the investigative skills of planning, research, analysis and presenting evidence.

### OUTCOME

Undertake practical research in order to present a dissertation on an issue relating to one Home Economics context.

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### Administrative Information

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## National Unit Specification: general information (cont)

**UNIT** Health and Food Technology:  
Practical Research and Dissertation (Advanced Higher)

### RECOMMENDED ENTRY

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

- Higher in Home Economics (from the relevant context to be studied)
- Higher Units in Home Economics (from the relevant context to be studied)
- a Course or Units at Higher level in a related subject area

The unit is also suitable for ‘new starts’ or adult returners with appropriate prior experience.

### CREDIT VALUE

1 credit at Advanced Higher.

### CORE SKILLS

This unit gives automatic certification of the following:

<b>Complete core skills for the Unit</b>	None
<b>Core skills components for the Unit</b>	Planning and Organising (H)

Additional information about core skills is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

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

### **UNIT**                      Health and Food Technology: Practical Research and Dissertation (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**

Undertake practical research in order to present a dissertation on an issue relating to one Home Economics context.

#### **Performance criteria**

- (a) The issue is identified and placed in context.
- (b) Suitable and relevant source materials and methods of investigation are identified.
- (c) There is a clear set of objectives which show logical progression from introduction to conclusion.
- (d) The research process is logical, appropriately focused, well sequenced and responsive to interim findings.
- (e) The research process is informed by appropriate references and sources.
- (f) Conclusions are valid, impartial and supported by research evidence and convincing argument.
- (g) The dissertation presents coherent, convincing arguments based on research findings.

#### **Evidence requirements**

For Outcome 1 PC (a) - PC (g) evidence in the form of a dissertation of approximately 3500 words, based on the performance criteria specified above. The dissertation topic should be identified by the candidate in negotiation with the teacher/lecturer and should be derived from the area of Course content.

Specific advice:

Evidence should be provided to show that each of the performance criteria have been met on one occasion. The source information should be current and should be of a scientific, technological or sociological nature and related to the appropriate context to be studied, for example issues relating to food or the food industry; textile and the textile industry or the welfare of the family.

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

### **UNIT**                      Health and Food Technology: Practical Research and Dissertation (Advanced Higher)

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

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

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

This Unit requires the candidate to complete a research project which may or may not be undertaken on an industrial placement. This will lead to the production of a dissertation which, as a product, is not assessed in the Unit assessment, but forms part of the external course assessment. The Unit assessment focuses on planning, researching, reviewing and analysing work which leads to the dissertation.

The topics for the research project or industrial placement should be derived by the candidate from the content of **one** context for study in Advanced Higher Home Economics. It must be stressed that the interest and expertise of the candidate and teacher/lecturer and the availability of resources must be taken into account, when selecting topics. Those wishing to participate in an industrial placement will be expected to carry out research whilst on the placement. Work-shadowing on its own will not be appropriate.

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

Guidance will be provided on specifications for the research project and the industrial placement. These specifications will include an element of flexibility so that candidates are not restrained from pursuing new avenues. Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning and assessment. The nature of a candidate's special needs should be taken into account when planning learning experiences and selecting and designing assessment instruments.

Evidence for this Unit can be collected through the teacher/lecturer interviewing the candidate on three occasions, and presentation of a dissertation. Two of these interviews could be carried out during the research/placement and one on completion. The teacher/lecturer could record evidence of achievement using questions and a checklist based on the performance criteria. These interviews should not be confused with tutorials given by teachers/lecturers to offer advice and assistance. Should the teachers/lecturers wish to use this evidence to predict attainment in relation to the Course award in Advanced Higher Home Economics, they should refer to the grade descriptions.

This Unit can be delivered concurrently with Resource Management to form the component Units of Advanced Higher Home Economics in **one** context of study. Generation of evidence can be achieved by integrating Outcomes 1-3 of Resource Management with this Unit.

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

**UNIT** Health and Food Technology:  
Practical Research and Dissertation (Advanced Higher)

### **SPECIAL NEEDS**

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).