

National Unit Specification: general information

UNIT	Fashion and Textile Technology: Technology in Home Economics (Intermediate 1)
NUMBER	D04Y 10
COURSE	Home Economics: Fashion and Textile Technology (Intermediate 1)

SUMMARY

This unit provides opportunities to identify through practical activities the impact on lifestyles of current technological developments in textiles.

OUTCOMES

- 1 Give an explanation of recent technological developments relating to textiles and their impact on lifestyle.
- 2 Create a product to meet the needs of a given design brief.

RECOMMENDED ENTRY

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

- Standard Grade Home Economics at Foundation level
- Access 3 units in Home Economics
- Access 3 units or Standard Grade at Foundation level in a relevant subject

The unit is also suitable for 'new starts' and adult returners with appropriate prior experience.

Administrative Information

Superclass:	JK
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National Unit Specification: general information (cont)

UNIT Fashion and Textile Technology:
Technology in Home Economics (Intermediate 1)

CREDIT VALUE

1 credit at Intermediate 1

CORE SKILLS

This unit gives automatic certification of the following:

Complete core skills for the unit Problem Solving Int 1

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 Fashion and Textile Technology: Technology in Home Economics (Intermediate 1)

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

OUTCOME 1

Give an explanation of recent technological developments relating to textiles and their impact on lifestyle.

Performance criteria

- (a) An accurate explanation of the technological development is given.
- (b) The effects the technological development have on lifestyle are explained

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a folio of work. Attainment could be assessed by the use of a marking scheme. Specific advice:

- (a) four technological developments:
 - **two** from textiles for clothing: stretch fibres; fleece; breathable membrane; waterproof finish; microfibre
 - **two** from manufacture or care of clothing: sewing machine; knitting machine; computerised embroidery system; computer-aided design system; computer-aided manufacture system, overlocker, washing machine, tumble drier; washer/drier; iron
- (b) four effects from
 - time/labour saving
 - environmentally-aware features
 - computerised/electronic features
 - comfort in use
 - ease of care
 - increase in leisure time
 - time/energy-saving features
 - increase in use for leisure type clothing
 - ease of use

OUTCOME 2

Create a product to meet the needs of a given design brief.

Performance criteria

- (a) A specification is proposed in measurable terms.
- (b) A logical strategy is proposed for manufacturing the product.
- (c) Manufacturing is carried out using the resources efficiently.
- (d) The evaluation of the process and the product is relevant and accurate.

National Unit Specification: statement of standards (cont)

UNIT Fashion and Textile Technology:
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Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a design activity. Attainment should be recorded by the use of an observational checklist. Specific advice:

- (a) At least three criteria for the specification are identified.
- (b) Evidence of planning the strategy shows consideration of: time, skills, choice of materials and equipment.
- (c) The product is prepared according to instruction, taking account of correct techniques and procedures for manufacture, including: the use of process skills; the use of equipment; safe, hygienic practices.
- (d) The process is evaluated against the criteria listed in (a). The product is evaluated against the specification.

National Unit Specification: support notes

UNIT Fashion and Textile Technology: Technology in Home Economics (Intermediate 1)

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: Fashion and Textile Technology (Int 1).

Outcome 1

Through practical activities, candidates should examine the impact on lifestyles of a range of current technological developments:

developments in textiles for clothing:

- stretch
- fleece
- breathable membrane
- waterproof finishes
- microfibre

developments in equipment for manufacture or care of clothing:

- sewing/knitting machine
- computerised embroidery system
- computer-aided design system
- computer-aided manufacture system
- overlocker
- washing machine
- tumble drier
- washer drier
- iron

(developments will be updated as appropriate).

Candidates should be given opportunities to determine and understand the possible impacts of technological developments, namely:

- time/labour/saving features
- environmentally-aware features
- computerised/electronic features
- increased use of leisure-type clothing
- comfort in use
- ease of care
- increase in leisure time.
- ease of use
- time/energy-saving features

National Unit Specification: support notes (cont)

UNIT Fashion and Textile Technology: Technology in Home Economics (Intermediate 1)

Outcome 2

Candidates should be given opportunities to acquire and demonstrate technological perspective, confidence, sensitivity and creativity through practical activities; and to make effective use of specialist skills, knowledge and experience gathered whilst undertaking activities relating to Outcome 1.

Candidates should examine the needs of individuals or groups of people with a specified need to determine appropriate criteria for artefacts or systems to meet these needs. Individuals or groups that may have specified needs could be:

- single parent families
- the elderly
- single people living alone
- people with disabilities
- low income families
- professionals
- couples with demanding careers, two incomes and no children etc.

The criteria for the artefact or system will depend on the lifestyle and need/s of the identified individual or group of people, eg available resources including money, cost effectiveness, type of disability, labour saving, time saving, energy conservation and use, cost of fuel, environmental implications, principles of design.

GUIDANCE ON TEACHING AND LEARNING APPROACHES FOR THIS UNIT

A wide variety of learning and teaching approaches to generate evidence should be used and candidates should be actively involved in the learning process through practical activity, wherever possible. The teaching approach for the majority of the time should be candidate-centred and should contribute to the development of skills and to the acquisition of knowledge and understanding. Discussion of progress between the candidate and teacher/lecturer should be ongoing throughout.

Candidates should be given time to reflect on past, present and possible future technological developments and the effects of human interaction on the environment.

Opportunities should be offered for candidates to:

- develop imaginative approaches and creative ways of doing things that benefit the environment
- develop an understanding of factors which contribute to the success of a well-designed product
- develop an appreciation of the relationship between technology and the world of work.

All of the above opportunities should be offered through practical activities which could include: comparative testing; fabric testing; practical investigations; interviews; outside visits; workshops; sensory evaluations.

National Unit Specification: support notes (cont)

UNIT Fashion and Textile Technology: Technology in Home Economics (Intermediate 1)

Group work should be used to maximise candidate involvement and interaction, and whole-class teaching used to reinforce and consolidate knowledge gained. From the outset of the unit candidates should be made aware of the purpose of the unit, the relationship between the learning activities and the outcomes and the level of achievement expected. Candidates should be encouraged to discuss problems, exchange ideas, assist each other and make decisions. Safety, safe practices and the care and use of equipment should be an integral part of all activities carried out. (See also advice in the course details.)

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

For Outcome 1, candidates should keep a record of their investigations in relation to technological developments. Explanations of the impact of technological developments on lifestyle should be supported by evidence which might include argument.

Evidence for Outcome 2 can be generated through the production of a folio of work. The folio should include:

Planning:

- a specification for a product
- a planning sheet outlining stages for the preparation and manufacture of the product

Manufacture and evaluation

- evidence of effective selection and use of materials, equipment and resources
- evidence of evaluation of the product against the specification

Further guidance and exemplification on appropriate evidence will be provided in the Subject Guide.

The delivery and assessment of this unit provides alternative methods to support the inclusion of all candidates. Examples include:

- increase in the time allowed
- use of technology to record information/instructions and to support assessment situations
- additional teacher/lecturer or auxiliary support in practical activities
- use of specialist equipment

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 and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).