



COMPUTING STUDIES
Access 2 level

1st edition — published August 2009



National Course Specification

COMPUTING STUDIES (Access 2)

COURSE CODE C207 08

COURSE STRUCTURE

This Course has three mandatory Units:

F7H8 08	<i>Computing Studies: Using Computer Applications</i>
F7H9 08	<i>Computing Studies: Using Internet Applications</i>
F7HA 08	<i>Computing Studies: Using Multimedia Applications</i>

This Course includes 40 hours over and above the 120 hours for the Units. This may be used for induction, extending the range of learning and teaching approaches, support, consolidation and integration of learning.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

PROGRESSION

This Course or its Units may provide progression to:

- ◆ the Access 3 Computing Studies Course or its Units
- ◆ Standard Grade Computing Studies at Foundation level
- ◆ Further Education
- ◆ Supported Employment

Administrative Information

Publication date: August 2009

Source: Scottish Qualifications Authority

Version: 01

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National Course Specification: (cont)

COMPUTING STUDIES (Access 2)

CREDIT VALUE

The SCQF level 2 Course in Computing Studies is allocated 18 SCQF credit points at SCQF level 2*.

**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.*

CORE SKILLS

Achievement of this Course gives automatic certification of the following:

Complete Core Skill *Information Communication Technology at SCQF level 2*

National Course Specification: Course details (cont)

COMPUTING STUDIES (Access 2)

RATIONALE

In recent years, ICT skills have grown in importance for all members of society and not just for vocational purposes. Younger people in particular are increasingly using computers as part of their everyday lives, for communication with friends and family, for leisure time activities (including gaming and accessing music, etc) and for researching and shopping on the web. Increasingly ICT skills will be required for effective citizenship.

The Computing Studies Course at Access 2 level seeks to address these issues through a coherent grouping of Units which offers candidates a broad introduction to a range of skills and activities that should increase their confidence in the use of ICT equipment.

It is anticipated that the Course will be attractive to a wide range of potential candidates, but particularly candidates who wish to gain basic ICT skills and have had no previous experience of ICT. The general aims of this Course are to:

- ◆ foster confidence and enjoyment in using ICT
- ◆ develop basic skills in using ICT equipment
- ◆ develop basic skills in using applications for education and leisure
- ◆ develop awareness of personal safety issues when using ICT equipment
- ◆ facilitate progression to the corresponding Course at SCQF level 3

Throughout the Course candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer as candidates progress through the Units of the Course.

National Course Specification: Course details (cont)

COMPUTING STUDIES (Access 2)

COURSE CONTENT

Summary of Course content

This Course comprises three mandatory Units. Candidates must achieve all three Units to achieve the overall Course award. The three Units are:

Computing Studies: Using Computer Applications

Computing Studies: Using Internet Applications

Computing Studies: Using Multimedia Applications

The Course provides candidates with the opportunity to develop various skills and demonstrate basic knowledge and understanding of:

- ◆ commonly used computer hardware
- ◆ hardware used for multimedia purposes
- ◆ basic operations involving general IT applications
- ◆ basic operations involving multimedia applications
- ◆ basic web search and e-mail applications

Summary of Unit content

Computing Studies: Using Computer Applications

This Unit provides candidates with the opportunity to become familiar with the hardware components that form part of a Personal Computer and the names of those components. Candidates will also use two IT applications (selected from Word Processing; Spreadsheets; Interactive Board; Graphics Package for drawing; or Powerpoint) and demonstrate three basic skills in using each package.

Computing Studies: Using Internet Applications

This Unit is designed to help candidates become familiar with the use of the internet for simple research, the use of e-mail to send and receive messages and the importance of safety considerations when using these tools.

Computing Studies: Using Multimedia Applications

This Unit is designed to help candidates become familiar with the hardware components and applications that might be used to prepare a multimedia presentation. With teacher/lecturer support candidates will identify the main pieces of hardware used in multimedia applications and will demonstrate the basic skills required to create a multimedia presentation.

National Course Specification: Course details (cont)

COMPUTING STUDIES (Access 2)

ASSESSMENT

Courses at Access level differ from most of the Courses at the other levels in that there is no external assessment required. To achieve the Course award candidates must pass all three Units. Throughout the Course candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer as candidates make progress through the Units of the Course.

Candidates should be made aware of assessment criteria and instruments of assessment to be used. It is anticipated that ongoing assessment will take place, informing and supporting candidates. Holistic approaches to assessment should be adopted where possible and a variety of approaches to assessment may be appropriate. Details of assessment are provided in the unit specifications. Candidates will prepare for the outcomes of each unit through on-going learning and teaching activities.

Assessment objectives

Assessment across the Units of this Course allows the candidate to use and become familiar with different aspects of computing involving commonly used applications. The Course allows candidates to:

- ◆ demonstrate their knowledge of the basic hardware involved in Computing activities
- ◆ display some basic skills in the use of certain computer applications
- ◆ perform basic searches using the internet
- ◆ send and receive e-mail messages
- ◆ use multimedia applications for leisure and learning
- ◆ understand some basic health and safety issues and security issues involved in using computers

Unit assessment

For some aspects of the Units, written and/or recorded oral evidence using the candidate's preferred method of communication is required. In some instances product evidence, such as printouts or electronic files could be collected as evidence. Evidence could also be recorded using, for example, a checklist, video or audio recording.

Further details about Unit assessment for this Course can be found in the individual Unit Specifications and the National Assessment Bank (NAB) materials.

QUALITY ASSURANCE

All National Courses are subject to external verification. External Verifiers are trained by SQA to apply national standards.

The Units of all Courses are subject to internal verification and may also be chosen for external verification. This is to ensure that national standards are being applied across all subjects. Courses may be assessed by a variety of methods. To assist centres, Senior Verifier reports are published on SQA's website www.sqa.org.uk.

National Course Specification: Course details (cont)

COMPUTING STUDIES (Access 2)

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS COURSE

Candidates will come to this programme from a wide variety of backgrounds and with different levels of prior attainment. There will be candidates who:

- ◆ have not participated in Standard Grade
- ◆ are adult returners
- ◆ have completed or are completing Standard Grade courses in some subjects and need more accessible provision in other areas of study
- ◆ wish to undertake a new area of study within the Access 2 framework to allow for lateral progression
- ◆ have progressed towards Access 2 from Access 1

This programme aims to meet the needs of all these candidates. It will also be important in the teaching and learning that teachers and lecturers take account of the different abilities and educational goals of each candidate.

Given the potentially diverse population within a group working at this level, the challenge for teachers and lecturers will be to develop an integrated provision which interests and stimulates more mature adult returners as well as younger learners but which at the same time allows for individual needs to be addressed.

As part of the Course induction process, teachers/lecturers should devote time to ensuring that candidates have a clear understanding of the expectations for the Course and Units by explaining and discussing Outcomes, Performance Criteria, Evidence Requirements and where appropriate Core Skills. In some cases, group/class discussion about the requirements of the Course may encourage the sharing of ideas and understanding within a group.

Approaches to assessment

Evidence should be gathered at appropriate points as candidates make progress through the Course. Each candidate should be allowed to produce the evidence using his/her preferred mode of communication which may be verbal or non-verbal. Teachers/lecturers should select appropriate activities depending on the age and individual abilities of each candidate. All relevant health and safety guidelines should also be taken into account during the activities and when deciding upon appropriate levels of support.

Throughout the Course candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer as candidates progress through the Units of the Course.

Observation checklists and other records of assessment should be maintained and kept up-to-date in order to track candidate progress and to provide evidence for verification. Observation checklists may relate to just one candidate, a group of candidates or a whole class. In some cases, it may also be possible to collect product evidence in the form of electronic files, hard copy written work, computer printed documents, etc.

National Course Specification: Course details (cont)

COMPUTING STUDIES (Access 2)

DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements



National Unit Specification: general information

UNIT Computing Studies: Using Computer Applications

CODE F7H8 08

SUMMARY

This Unit is a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with the components of a Personal Computer and the use of commonly available computer applications. With teacher/lecturer support candidates will identify the main pieces of hardware used in a Personal Computer and will demonstrate basic skills in the use of two specific Computer Applications.

OUTCOMES

- 1 Identify hardware used in a computer system
- 2 Perform basic operations using computer applications

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at Access 2 level (6 SCQF credit points at SCQF level 2).

**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.*

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Superclass: CA

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Version: 01

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National Unit Specification: general information (cont)

UNIT Computing Studies: Using Computer Applications

CORE SKILLS

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Providing/Creating Information

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

UNIT Computing Studies: Using Computer Applications

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 SQA.

OUTCOME 1

Identify hardware used in a computer system

Performance Criteria

- (a) Hardware components are identified correctly
- (b) Health and safety and hygiene requirements are identified correctly

OUTCOME 2

Perform basic operations using computer applications

Performance Criteria

- (a) Procedures to access applications are followed correctly
- (b) Demonstrate basic skills relating to the applications used
- (c) Exit from the application is completed correctly
- (d) Save is executed correctly using the applications
- (e) Print is executed correctly using the applications

National Unit Specification: statement of standards (cont)

UNIT Computing Studies: Using Computer Applications

EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Candidates will receive directive support from their teacher/lecturer throughout the Unit. This means that the teacher/lecturer should issue explicit instructions to candidates to assist them in preparation for their assessment and where appropriate candidates may be prompted during the assessment itself. Prompting should be used to focus the candidate's attention on the activity to allow them to remain on task or get them back on track.

Each candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal. If candidates are producing written evidence using a keyboard, they will only be expected to write a single word or short phrase. Assistive technology tools and devices can be used when this is the normal means of communication for candidates.

Evidence in the form of written and/or oral and/or other recorded modes of communication, will be required in relation to all of Outcome 1.

Performance evidence will be required in relation to Outcome 2. This should provide evidence of performance using two software applications and, in relation to Performance Criteria (e), could be generated from the completion of practical exercises resulting in a printout. Each exercise should involve incorporating amendments. This performance evidence should all be recorded on an observation checklist.

The specific evidence required to demonstrate the achievement of each Outcome is listed below:

For Outcome 1, each candidate must:

- ◆ identify six hardware components (these might include, for example: keyboard, monitor, disc drive, USB Port, mouse, printer, touch screen, CD ROM, speakers);
- ◆ identify one health and safety requirement and one hygiene requirement of using computer hardware.

For Outcome 2, Performance Evidence should be recorded to show that each candidate:

- ◆ used two of the following applications: Word Processing; Spreadsheets, a simple Database, Graphics Package (for drawing only); Presentation software.
- ◆ can use keyboard to enter alphanumeric data correctly using upper and lower cases and use shift, space, return and delete keys as appropriate.
- ◆ can demonstrate three basic skills within each application to make appropriate changes and the three basic skills are: insert; amend; and delete.
- ◆ can access and exit from the two applications using the correct procedure;
- ◆ can save and print documents correctly within the two applications.

National Unit Specification: support notes

UNIT Computing Studies: Using Computer Applications

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 a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with the components of a Personal Computer and the use of commonly available computer applications. With teacher/lecturer support candidates will identify the main pieces of hardware used in a Personal Computer and will demonstrate basic skills in the use of two specific Computer Applications.

Teachers/lecturers should select meaningful and appropriate practical activities depending on the age and individual abilities of each candidate. Using information technology can be a cross curricular activity and this Unit may provide the opportunity to adopt an interdisciplinary approach when selecting activities.

All relevant health and safety guidelines should be taken into account during activities relating to this Unit and when deciding upon the appropriate levels of support for candidates.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Learning and teaching approaches used should take account of the particular needs of the individual candidate and the candidate group. It may be beneficial for candidates to work in small groups or pairs to practice the use of applications and to learn from each other if appropriate. However, it is expected that there will be considerable teacher/lecturer input to prepare candidates for assessment, to encourage them to practice applications they are using and to gradually introduce new functions within the applications depending on the capability of each candidate.

The teacher/lecturer should fully demonstrate the use of each piece of equipment prior to its use by the candidate. Terminology and procedures should also be introduced in the context of the practical exercises.

In relation to Outcome 1, candidates may learn over time, through familiarity, the correct names for each hardware component they use. However, some candidates may find it helpful to have some components clearly labelled to remind them when they are using these components, what they are called. Candidates must also learn the health, safety and hygiene routines that should apply when working with computers and this could be covered as a set of class rules that could be discussed and agreed as part of a group discussion.

For Outcome 2, a range of applications should be used where possible and the activities performed should be meaningful, relevant and appropriate to the interests and abilities of the candidates. Activities could include producing a document, using one of the applications, which contributes to a wider project activity. The table below gives a few examples of possible activities and links to wider projects.

National Unit Specification: support notes

UNIT Computing Studies: Using Computer Applications

Wider project/topic	Activity	Application used
Home Economics	Creating menus for a meal	Word Processing/Graphics package
Preparing for an Enterprise Activity	Creating posters to advertise a coffee morning or creating a price list for items in a sale.	Word Processing/Graphics package
Enterprise activity	Recording sales data from a coffee morning or other event	Spreadsheet or Database
Social Subjects – project on weather	Collecting and recording data on weather, including rainfall, etc	Database

Although candidates are required to show only three specific basic skills (insert, amend and delete) to achieve the Unit, teachers/lecturers may want to cover further skills as part of the learning and teaching. The following table provides some examples of skills that could be introduced to some candidates at this level.

Basic Skills				
Word Processing	Spreadsheets	Database	Graphics	Presentation
Change font	Select cell	Enter data	Use line tool	Insert text box
Change text size	Enter data	Sort records	Select drawing tool	Format text
Change text colour	Change cell format	Search records	Use fill colour	Insert graphic
Make text bold	Select row/column	Delete record	Resize	Animate graphic
Change text alignment	Enter formula	Insert record	Copy and Paste	Format background

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill	None
Core Skill Component	<i>Providing/Creating Information</i>

As mentioned in the section above on learning and teaching approaches, the activities chosen for assessment of this Unit could be part of a wider project. If the chosen project covered Enterprise or Home Economics, for example, there could be opportunities to develop further Core Skills in Communication and Numeracy.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Delivery of this Unit may be dictated by the hardware and software that is available to the centre. As such the activities suggested in this section are simply examples of what might be possible if the required hardware and software mentioned are available in centres.

National Unit Specification: support notes

UNIT Computing Studies: Using Computer Applications

Teachers/lecturers should select appropriate activities, depending on the individual abilities and interests of each candidate. Throughout the Unit candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer.

Some examples of activities that could be used for the assessment of each Outcome are listed below.

Outcome 1

To assess Outcome 1, candidates could be asked to label an illustration with the correct names of six hardware components or to match the six correct names with the six correct components. Candidates could also be asked to identify a health and safety requirement relevant to the hardware used from a list of health and safety requirements, these could be represented by commonly used symbols (appropriate answers might include: risk of fire; high voltage; strain on eyesight; danger from trailing wires; etc). Likewise candidates could be asked to identify hygiene issues from a list of alternatives (appropriate answers might include: not eating food near the keyboard; not drinking liquids near the hardware; ensuring hands are clean and dry before touching hardware; etc).

Outcome 2

To assess Outcome 2, candidates must show their ability to use the correct procedures to access and exit two application programmes, from: Word Processing; Spreadsheets; a simple Database; a Graphics Package (for drawing only); Presentation software. Candidates also have to use three basic skills (insert, amend, and delete) while using the two applications. In addition, candidates must show that they can save and print their work correctly using the applications.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by information and communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website

www.sqa.org.uk/assessmentarrangements



National Unit Specification: general information

UNIT Computing Studies: Using Internet Applications

CODE F7H9 08

SUMMARY

This Unit is a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with the use of the internet for simple research, the use of e-mail to send and receive messages and the importance of safety considerations when using these tools. Candidates can expect a high level of teacher/lecturer support throughout the delivery of this Unit.

OUTCOMES

- 1 Use a search engine to find information on the internet
- 2 Use an e-mail application to send and receive messages

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at SCQF level 2 (6 SCQF credit points at SCQF level 2).

**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.*

Administrative Information

Superclass: CB

Publication date: August 2009

Source: Scottish Qualifications Authority

Version: 01

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National Unit Specification: general information (cont)

UNIT Computing Studies: Using Internet Applications

CORE SKILLS

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill None

Core Skill component Accessing Information

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

UNIT Computing Studies: Using Internet Applications

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 SQA.

OUTCOME 1

Use a search engine to find information on the internet.

Performance Criteria

- (a) Identify keywords appropriate for given internet searches.
- (b) Navigate websites to find specified information.
- (c) Identify safety rules for appropriate internet use.

OUTCOME 2

Use an e-mail application to send and receive messages.

Performance Criteria

- (a) Access the e-mail application correctly.
- (b) Produce and send an e-mail message to a specified address.
- (c) Open and reply to an e-mail message.
- (d) Identify safety rules for appropriate e-mail use.

National Unit Specification: statement of standards (cont)

UNIT Computing Studies: Using Internet Applications

EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Candidates will receive directive support from their teacher/lecturer throughout the Unit. This means that the teacher/lecturer should issue explicit instructions to candidates to assist them in preparation for their assessment and where appropriate candidates may be prompted during the assessment itself. Prompting should be used to focus the candidate's attention on the activity to allow them to remain on task or get them back on track.

Each candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal. If candidates are producing written evidence using a keyboard, they will only be expected to write a single word or short phrase.

Performance Evidence and written/oral or other recorded modes of communication, will be required in relation to Outcomes 1 and 2.

The specific evidence required to demonstrate the achievement of each Outcome is listed below:

For Outcome 1, each candidate must:

- ◆ identify at least one keyword that would be appropriate for an internet search on a given topic
- ◆ use simple navigation techniques to complete at least two searches for specified information on websites selected by the teacher/lecturer
- ◆ identify two rules concerning the safe use of the internet

For Outcome 2, each candidate must:

- ◆ open the relevant e-mail application and access as appropriate to write and to read e-mail
- ◆ produce a short e-mail message and send to an address given by the teacher/lecturer (the address can be selected from a local address book)
- ◆ open a message in the e-mail application inbox and send a simple message using the reply option
- ◆ identify two safety rules for appropriate e-mail use and record these using their normal means of communication

National Unit Specification: support notes

UNIT Computing Studies: Using Internet Applications

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 a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with the use of the internet for simple research and as a communication tool. The importance of safety considerations when using e-mail to send and receive messages should be stressed. Candidates can expect a high level of teacher/lecturer support throughout the delivery of this Unit.

Candidates should be made aware of the policies concerning use of the internet within the centre and what their responsibilities are in this regard. They should also be made aware that there will be monitoring by teachers/lecturers and that firewall software will be ever present during preparation and assessment for this Unit.

It will clearly be important for teachers/lecturers to ensure that the search engines used and the firewall protection in place within the centre will provide adequate protection for candidates and the centre during the delivery of this Unit.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Candidates could work individually, in pairs or in small groups to practice the use of applications and to learn from each other if appropriate. However, it is expected that there will be considerable teacher/lecturer input to prepare candidates for assessment, to encourage them to practice applications they are using and to gradually introduce new functions within the applications depending on the capability of each candidate.

The teacher/lecturer should fully demonstrate the use of each application and each stage in the search and sending/receiving process prior to its use by the candidate. Terminology and procedures can also be introduced in the context of the practical exercises, although it is not a requirement of this Unit for candidates to remember or use the correct terminology.

For Outcome 1, where possible, candidates should be given the opportunity to choose the topics to be covered. This is likely to be dictated by the personal interests of the candidate, the topics offered by the teacher/lecturer and the limitations imposed by firewall procedures within the establishment.

For Outcome 2 there will be less opportunity for candidate choice. Communication is likely to be within a closed community system or with an approved service provider. Either of these are liable to be dictated by the teacher/lecturer as one that has been approved, for safety and security reasons, for use within the establishment or local authority.

National Unit Specification: support notes (cont)

UNIT Computing Studies: Using Internet Applications

There may be opportunities to integrate the delivery of this Unit with the delivery of other Units the candidate may be completing in other subject areas. The internet search required as part of Outcome 1 could be delivered in conjunction with any other Unit where research into a given topic is required and the message sent for Outcome 2, could be used to provide evidence towards English or Communication Units.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

There may be an opportunity to develop candidates' written communication skills through the requirement in Outcome 2 to create an email message. Candidates would need to write in sentences with appropriate punctuation and grammar.

The search requirement within Outcome 1 could be used to form part of a wider project where candidates could be asked to find a particular article or piece of information from a given website and the text found could then be used to develop the candidates reading skills, which again could contribute to the development of the Core Skill in Communication.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Delivery of this Unit may be dictated by the hardware, the software available to the centre, particularly in terms of the firewall and security arrangements in place.

Teachers/lecturers should select appropriate activities, depending on the individual abilities and interests of each candidate. Throughout the Unit candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer.

Some examples of activities that could be used for the assessment of each Outcome are listed below.

Outcome 1

To assess the first performance criteria, the candidate could be asked to source information about topics of interest to them (e.g. football teams, pop groups, animals, countries, places, etc). The candidate will be expected to identify a word or words that would provide a suitable search keyword for the given topic.

The candidate should also be asked to find two pieces of information from a website or websites specified by the teacher/lecturer. These pieces of information should require the candidate to perform a basic search of the given website(s) and could involve, for example, finding the cost of an item or finding a particular picture or a short piece of text.

For Performance Criteria (c) candidates must identify two rules concerning the safe use of the internet. For example, the rules could cover issues such as: personal identity protection; chat room dangers; ensuring that downloaded materials are appropriate; the appropriateness of accessed internet sites. Candidates could be assessed through multiple choice questions where they are asked to identify the appropriate rules from various alternatives or they could simply be asked to recall two rules previously learned during class activities.

National Unit Specification: support notes

UNIT Computing Studies: Using Internet Applications

Evidence could be recorded on an observation checklist, recording the candidate identifying the keyword and undertaking the search. For Performance Criteria (c), evidence could be recorded on an observation checklist and/or through written/scribed answers provided by the candidate.

Outcome 2

To assess this outcome candidates will show that they have been able to produce a short communication, send this to an identified recipient, receive a reply from them and then send an appropriate response back. For Performance Criteria (d) candidates must be able to identify issues concerning the safe use of e-mail, such as: personal identity protection; dealing with e-mails from an unidentified source; ensuring that downloaded materials are appropriate.

Evidence could be collected for Outcome 2 in the form of an e-mail produced by the candidate and an observation checklist recording the candidate completing the processes required to send an e-mail. Evidence in relation to Performance Criteria (d) could be recorded on an observation checklist and/or through written/scribed answers provided by the candidate.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by information and communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

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National Unit Specification: general information

UNIT Computing Studies: Using Multimedia Applications

CODE F7HA 08

SUMMARY

This Unit is a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with the hardware components and applications that might be used to prepare a Multimedia presentation. With teacher/lecturer support candidates will identify the main pieces of hardware used in multimedia applications and will demonstrate the basic skills required to create a multimedia presentation.

OUTCOMES

- 1 Identify hardware used for multimedia
- 2 Perform basic operations using multimedia applications
- 3 Use multimedia applications for leisure and for learning

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at SCQF level 2 (6 SCQF credit points at SCQF level 2).

**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.*

Administrative Information

Superclass: CE

Publication date: August 2009

Source: Scottish Qualifications Authority

Version: 01

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National Unit Specification: general information (cont)

UNIT Computing Studies: Using Multimedia Applications

CORE SKILLS

Achievement of this Unit gives automatic certification of the following:

Complete Core Skill	None
Core Skill component	Providing/Creating Information

National Unit Specification: statement of standards

UNIT Computing Studies: Using Multimedia Applications

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 SQA.

OUTCOME 1

Identify hardware used for multimedia.

Performance Criteria

- (a) Identify hardware used for data capture correctly.
- (b) Identify the function of hardware used for data capture correctly.
- (c) Identify Health and safety and hygiene requirements correctly.

OUTCOME 2

Perform basic operations using multimedia applications.

Performance Criteria

- (a) Create a basic multimedia presentation incorporating text and graphics.
- (b) Save and retrieve presentation correctly.
- (c) Exit from the application correctly.
- (d) Print documents correctly using the applications.

OUTCOME 3

Use multimedia applications for leisure and for learning.

Performance Criteria

- (a) Procedures to access applications are followed correctly.
- (b) Demonstrate basic skills relating to the applications used.
- (c) Exit from the applications is completed correctly.
- (d) Explain the main purpose of each application used.

National Unit Specification: statement of standards (cont)

UNIT Computing Studies: Using Multimedia Applications

EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Candidates will receive directive support from their teacher/lecturer throughout the Unit. This means that the teacher/lecturer should issue explicit instructions to candidates to assist them in preparation for their assessment and where appropriate candidates may be prompted during the assessment itself. Prompting should be used to focus the candidate's attention on the activity to allow them to remain on task or get them back on track.

Each candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal. If candidates are producing written evidence using a keyboard, they will only be expected to write a single word or short phrase or sentence.

Evidence in the form of written and/or oral and/or other recorded modes of communication, will be required in relation to all of Outcome 1.

The specific evidence required to demonstrate the achievement of each Outcome is listed below.

For Outcome 1, written and/or oral and/or other recorded modes of communication will be required to record that each candidate can:

- ◆ identify two hardware components used for multimedia purposes (these might include, for example: digital camera; digital video camera, MP3/MP4 player, scanner, microphone, web camera, joystick/joy-pad, speakers)
- ◆ identify the function of each of the hardware components
- ◆ identify two health and safety requirements and one hygiene requirement relating to the use of the multimedia hardware

For Outcome 2, evidence should be collected in the form of a printed copy of the presentation slide produced by the candidate. The slide will include both text and at least one image. The text need not be any more than a few words in length. In addition, for Outcome 2, performance evidence should be collected to show that the candidate successfully saved and retrieved their presentation and closed the application correctly, this could be recorded on an observation checklist.

For Outcome 3, performance evidence should be recorded in the form of an observation checklist to show that the candidate can:

- ◆ access an application used for leisure activities and one used for learning purposes — on at least two occasions for each application
- ◆ demonstrate basic skills in using the leisure application and the learning application
- ◆ exit from the applications using the correct procedure
- ◆ give a basic explanation of the main purpose of each application

National Unit Specification: support notes

UNIT Computing Studies: Using Multimedia Applications

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 a mandatory Unit in the Access 2 Computing Studies Course but it can also be delivered as a free-standing Unit. It is designed for candidates studying in a supported learning environment who wish to develop their skills in the use of computers.

This Unit is designed to help candidates become familiar with some of the hardware and software used for Multimedia purposes. With teacher/lecturer support candidates will identify two pieces of hardware used for multimedia purposes and the purpose of each piece of hardware. The candidates will also demonstrate basic skills in the use of two multimedia applications.

In relation to Outcome 2, it should be noted that candidates are expected to create a multimedia presentation using appropriate software. The minimum requirement will be two slides/pages, incorporating text and at least one graphic on each. However, where appropriate, candidates should be made aware of other forms of multimedia (ie sound, animation, movie files, etc) and encouraged to investigate the use of these within their presentation, if suitable software and hardware are available within the centre.

For outcome 3 the leisure application chosen could be for example a computer game (accessed from an installed program, CD-ROM or the Internet), while the education application could be an e-encyclopaedia, or an e-learning tool. The e-learning tool could be, for example, from another curricular area such as mathematics, language, music, etc. This might provide an opportunity for integration with delivery of other subjects such as Maths and English.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Where possible, candidates should be introduced to a wide range of multimedia content, ie text, sound and graphics (still, animation and movies). This may help candidates see the wider context of multimedia activities and the uses made of them.

Outcome 1

Where possible, candidates should be introduced to items of multimedia hardware, their function and any health and safety requirements, in a practical context. The teacher/lecturer should fully demonstrate the use of each piece of equipment prior to its use by the candidate. Terminology and procedures should also be introduced in context during practical exercises. Depending on the activities that are completed, it may be possible for the product of these exercises to be incorporated into the presentation created for Outcome 2.

National Unit Specification: support notes (cont)

UNIT Computing Studies: Using Multimedia Applications

Some of the following activities could be used as part of teaching and learning for Outcome 1:

- ◆ capturing graphics/moving images using a digital camera, scanner or digital video camera
- ◆ sourcing graphics or animations from multimedia libraries (e.g. installed programs, CD-ROMs or appropriate websites)
- ◆ accessing multimedia files stored on an MP3/MP4 player
- ◆ capturing sound files using a microphone or sourcing sound files from appropriate multimedia libraries
- ◆ using a joystick or joy-pad while using leisure software

Health and safety issues can also be introduced to candidates during practical exercises. Health and safety issues might include, for example: risk of fire; high voltage; strain on eyesight; danger from trailing wires, etc.

Outcome 2

Candidates should be introduced to software which will allow them to create a presentation, preferably through practical exercises. The teacher/lecturer should fully demonstrate the features of the software prior to its use by the candidate. Simple terminology could also be introduced in context during practical exercises.

If possible, items of hardware used during activities relating to outcome 1 should be incorporated into the completion of the presentation for Outcome 2. The presentation candidates must complete for Outcome 2 can cover any topic, for example:

- ◆ a simple presentation about the candidate (eg 'all about me')
- ◆ a simple presentation on a topic the candidate may be undertaking as part of another subject, such as Social Subjects, Science or Personal Development
- ◆ a simple presentation on a hobby or interest

Outcome 3

Candidates should be introduced to the fact that multimedia can be used for a variety of purposes and various examples could be used.

Candidates should be given the opportunity to try several different multimedia applications if possible. These might include, for example: computer games; e-learning tools such as a mathematics or language programs; an e-encyclopaedia; a music library; an application for storing/editing digital images; etc.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

There is a clear opportunity to link the delivery of this Unit with the delivery of the Oral Communication component of the Communication Core Skill. Candidates can prepare content and slides for a presentation using the *Information and Communication Technology* skills covered in this Unit, while the actual delivery of the presentation could contribute to the achievement of the Communication Core Skill.

National Unit Specification: support notes (cont)

UNIT Computing Studies: Using Multimedia Applications

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Delivery of this Unit may be dictated by the hardware and software that is available to the centre. As such the activities suggested in this section are simply examples of what might be possible if the required hardware and software mentioned are available in centres.

It is suggested that candidates are introduced to a wide range of multimedia content and sources where this is possible. More advanced features of multimedia hardware and software can be investigated where candidates show sufficient interest and understanding of the topic.

Teachers/lecturers should select appropriate activities, depending on the individual abilities and interests of each candidate. Throughout the Unit candidates will be working in a supported learning environment. This means that prompting and support will be given as appropriate by the teacher/lecturer.

Some examples of activities that could be used for the assessment of each Outcome are listed below.

Outcome 1

Identifying multimedia hardware components and their function could be done through a matching exercise and/or a labelling exercise. Candidates could be shown some pictures of components and some cards or stickers containing the names and functions of the components, which they would be asked to match with the correct picture. Candidates could also be asked to identify the health and safety requirements and the hygiene requirement through a series of multiple choice questions or by recalling at least two health and safety requirements and one hygiene requirement in response to written or oral questions.

Outcome 2

The assessment for Outcome 2 could be done as part of a project on any topic with the multimedia presentation being used to show what candidates have been learning (this could offer a good opportunity for integration with other Units). Candidates will be expected to create at least two slides including a few words of text and at least one image on each. Printed copies of the presentation slides could be kept as evidence along with an observation checklist to record the candidate using the application to save, open and print the presentation and to record the candidate exiting the application.

Outcome 3

For Outcome 3, candidates should be given access to one application for learning and one for leisure purposes. Candidates must use both applications on at least two occasions. Evidence can be collected on an observation checklist to show that the candidate was able to demonstrate basic skills relating to the application. For example this might involve the use of a joystick to move characters appropriately within a game, or using an e-encyclopaedia to find a specific topic.

To cover the last performance criteria for Outcome 3, candidates must explain the main purpose of each application. This might be assessed through a couple of simple multiple choice questions where candidates have to identify the correct explanation from several alternatives.

National Unit Specification: support notes (cont)

UNIT Computing Studies: Using Multimedia Applications

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by information and communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence.

Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements