

Higher National Unit specification

General information

Unit title: Camera: Selection, Mounts and Advanced Functions

Unit code: H4AC 35

Superclass: KA

Publication date: June 2013

Source: Scottish Qualifications Authority

Version: 01

Unit purpose

The purpose of this Unit is to provide learners with the knowledge of the role of a camera operator and/or skills necessary to select appropriate cameras, mounts and ancillary equipment to operate within a variety of environments.

Outcomes

On successful completion of the Unit the learner will be able to:

- 1 Evaluate the features and components of a variety of cameras to buy or hire.
- 2 Select and use a range of camera mountings and accessories.
- 3 Plan a shoot and gather optimum quality footage suitable for use in an edited sequence.

Credit points and level

2 Higher National Unit credits at SCQF level 8: (16 SCQF credit points at SCQF level 8)

Recommended entry to the Unit

Access to this Unit will be at the discretion of the centre. However, it is recommended that learners should have some prior knowledge and skills in camera operation. This may be evidenced by possession of the HN Unit *Camera: An Introduction*.

Higher National Unit specification: General information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

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

Context for delivery

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

Equality and inclusion

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

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

Higher National Unit specification: Statement of standards

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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.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Evaluate the features and components of a variety of cameras to buy or hire.

Knowledge and/or Skills

- Features available on different types of camera equipment
- Camera components
- ♦ Production styles Single Camera, Multi-camera
- Budgetary implications
- Buy or hire

Outcome 2

Select and use a range of camera mountings and accessories.

Knowledge and/or Skills

- Benefits of a variety of camera mountings and accessories
- Use a variety of camera mountings and accessories
- Health and Safety requirements and how to work safely within these

Outcome 3

Plan a shoot and gather optimum quality footage suitable for use in an edited sequence.

Knowledge and/or Skills

- Shooting for editing using various camera mountings
- Planning camera positions and movements
- Camera features and functions
- How to adjust camera settings
- Navigate the internal menu system on a camera

Higher National Unit specification: Statement of standards (cont)

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Evidence Requirements for this Unit

This Unit may be assessed Outcome by Outcome but it would also be possible to integrate the assessment of Outcomes 2 and 3.

Outcome 1

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

- Analyse and describe the features and components of a variety of cameras.
- Evaluate the features and components in relation to the type of production and budget.
- Analyse the advantages and/or disadvantages of owning and/or hiring camera equipment.

Learners must produce a report (1,200 words) or oral presentation (10 minutes) containing:

- An evaluation of camera features and components.
- A brief analysis of the advantages and/or disadvantages of camera ownership.
- ♦ A rationale for equipment selection for a minimum of **four** different programme styles, both factual and non-factual.

Outcome 2

Learners must provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- Select appropriate camera mountings and accessories to meet the requirements of a given brief.
- Operate a variety of camera mountings and accessories by producing camera footage that meets the brief.
- Produce shot logs.
- Produce risk assessment documents to satisfy health and safety requirements.

Learners must record camera footage which demonstrates the appropriate use of at least **three** different camera mountings and produce shot logs that include:

- Shot size and movement
- ♦ Focal length
- ♦ Exposure
- Filter settings
- ♦ Camera distance from subject at the beginning and end of a shot
- Approximate camera height

Learners must also produce a report which includes a rationale for choosing the camera mounts and an analysis of the advantages and challenges of using each mount. The report/presentation should be approximately 1,000 words/7–10 minutes in length.

Higher National Unit specification: Statement of standards (cont)

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A completed risk assessment form must be submitted which demonstrates that the learner has assessed any hazards and risks which may be present at the locations, and has dealt with them appropriately.

The camera footage, risk assessment form and report must be included in the portfolio of evidence submitted for this Outcome.

Outcome 3

Learners must provide evidence to demonstrate their skills and/or knowledge by showing that they can:

- ♦ Assess the locations by planning camera positions, creating a shotlist and carrying out risk assessments prior to shooting.
- Select and adjust appropriate camera settings to produce optimum quality images.
- Record material to permit the production of an edited sequence including: camera movements, reverse angles, changes in focal length and camera height.

Learners must produce a plan to shoot footage based on a given brief at a minimum of **three** separate locations which must include: an exterior location, an interior location using only artificial light and a mixed light location (using exterior and interior light, or different types of interior lighting).

The unedited footage must be delivered to the tutor and retained as evidence.

The camera footage, risk assessment form and report must be included in the portfolio of evidence submitted for this Outcome.



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Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

Guidance on the content and context for this Unit

The purpose of this Unit is to introduce learners to the real world of camera operation and enable them to acquire the skills necessary to undertake the role of a camera operator within a production team.

The Unit will develop the learners' knowledge of a variety of cameras, their accessories, uses, features and components. This will enable learners to evaluate equipment and identify what equipment would be best suited for a particular production.

It should also inform learners of the options for hiring or buying cameras and ancillary equipment and help them evaluate the advantages and disadvantages of being an owner operator.

Learners will be expected to produce recorded material that meets the requirements of a given brief (or briefs).

The emphasis of the Unit should be on achieving the best possible quality of camera footage to permit the best possible edit — within the constraints of the locations chosen for shooting, the production brief and the equipment available.

Guidance on approaches to delivery of this Unit

This Unit is designed to be practical in nature and, as such, the keeping of an accurate production file containing all relevant paperwork (camera logs, risk assessments, production briefs, evaluations) will be an important part of assessment evidence.

The learner's recorded footage must also be retained as evidence.

It is important that learners are given realistic production briefs which would be relevant in the real world of television.

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Guidance on approaches to assessment of this Unit

Outcome 1 should be an evaluation of a variety of cameras and their suitability to different productions, plus a demonstration of an understanding of the camera industry.

Outcome 2 should be assessed by learners evaluating the basic use of camera mounts and providing footage that demonstrates the use of three different mounts.

Outcome 3 should be assessed by learners planning to shoot in three separate and distinct locations with accompanying documentation in the form of: Project briefs, Location/camera plan and shotlist, Risk Assessments, Detailed Camera Logs.

Outcome 1

Learners need to be able to evaluate the various features of the primary models of cameras and associated components. The learner should have the ability to select the appropriate camera depending upon the type of production. Production styles include - Single Camera: documentary, corporate, drama, music video, reality television, electronic news gathering; Multi-camera on location such as live events, or studio production such as music videos, dramas, game shows, talent shows.

Camera features could include imaging device (size and crop factor), format (including compression systems and codecs), inputs and outputs (Composite, SDI, HDSDI, HDMI). Components could include lenses (fixed and interchangeable), matte boxes and filters, zoom controls, viewfinders and monitoring equipment, power sources (mains and battery). Learners should understand the impact of different lenses on the chosen image.

Learner should be able to explain the basic differences between being an owner/operator and hiring in, from a commercial and creative perspective. Their explanations should include flexibility of scheduling versus limited booking periods, hiring out over hiring in, insurance, maintenance, peripherals etc.

Note on the integrated assessment of Outcomes 2 and 3

The assessment for Outcome 2 may be treated as being a separate assessment which prepares candidates for Outcome 3. However, there is nothing to prevent the tutor from carrying out formative assessment initially, and then giving the learners a brief that allows the generation of evidence that would satisfy both Outcomes 2 and 3. Footage will be generated for both outcomes, as will be the Health and Safety documentation. The report could cover both Outcomes, the main difference being that **the final submitted footage must be suitable for the production of an edited sequence** as stated in the brief for Outcome 3.

Outcome 2

Learners must produce footage that demonstrates their ability to select and use camera mounts and accessories including tripods and/or pedestals, jibs, dollies, steadicam rigs, fig rig, shoulder mounts, glidetrack etc. All shots must be logged.

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The footage should demonstrate only appropriate use of the mounts. It does not need to be suitable for editing although it could be used as evidence for Outcome 3 if shot for editing.

Each learner must produce her/his own series of shots, but they must work in small groups to ensure the health and safety of their crew and others.

Assessment will be based on the camera footage, the camera logs, the risk assessment documents and the written/oral report. A tutor's observation checklist may be used.

Outcome 3

Camera features could include user settings, shutter and gain, ND filters, colour balance settings, video monitoring options, back focus settings.

Menu functions could include format and resolution settings, knee, black level, display options, white balance fine tuning, etc.

Assessment will be based on learner's footage from three separate locations which, if integration is preferred, could be included in the brief for Outcome 2.

Learner will work in teams (Health and Safety requirement), but each learner must record footage from each location that can be edited into a short sequence. A tutor's observation checklist may be used.

This assessment may be carried out as individual given briefs or as part of a larger project.

Opportunities for 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 Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment

Opportunities for developing Core and other essential skills

Depending on the learning and teaching approaches adopted, this Unit provides opportunities for developing all three components of the Core Skill of *Communication*, two components of *Problem Solving*, one of *Numeracy* and one of *Working with Others*.

Communication: Oral Communication at SCQF level 6

Learners will develop a broad range of skills while communicating with other members of the team. They will need to convey information and ideas to ensure they achieve their intended shots taking account of the situation and audience. Learners may also contribute to classroom debates and discussions all of which will require them to use vocabulary, register and sentence structure appropriate to the audience involved.

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Communication: Written Communication (Reading) at SCQF level 6

In order to become familiar with the theoretical aspects of camera work learners will have to read instructions or carry out research which will require them to read written text, much of which may involve technical and complex language.

Communication: Written Communication (Writing) at SCQF level 6

Learners may choose to write reports for Outcomes 1 and 2. They will be required to produce a shooting plan, shot logs, and to complete risk assessment forms.

Problem Solving: Critical Thinking at SCQF level 6

In order to complete the Unit, learners will have to interpret a given brief and select appropriate equipment to meet the requirements of the brief. The learner will have to compare and consider the choices available while also taking into account the end use of the product. The learner will gain an understanding and appreciation of the relationship between camera controls and functions; the selection of lens focal length; and the positioning of the camera while seeking to obtain a visually creative image. The learner will evaluate recorded material and decide on the effectiveness of making adjustments to camera and lens settings.

Problem Solving: Planning and Organising at SCQF level 6

In order to complete the Unit, learners will have to plan their activities. Before starting working on given briefs, learners will need to plan their camera work to ensure they meet the brief. This will involve a number of different aspects such as deciding on an approach, providing a series of camera shots that display an understanding of continuity with the production process, etc.

Numeracy: Using Graphical Information at SCQF level 5

The learner will develop skills required to produce and interpret plans of camera movement and positions.

Working with Others: Working Co-operatively with Others at SCQF level 6

The learner will likely be working on a team that is integrating other associated Units such as sound, lighting and editing. During this phase the learner will collaborate with others while considering individual preferences, working methods and shared goals within a task. Opportunities will arise for the learner to review and discuss their own performance with the aim of becoming more efficient and competent in the technical area. The learner will also have the chance to put some of the theories (of cameras and lenses) into practice while expanding both skill set and knowledge. It is probable that the learner will have to engage with other members of staff and/or external contacts dependant on the range and nature of the tasks (briefs) they are given. This will provide the learner with opportunities to demonstrate how resourceful they can be in identifying locations and organising contributors.

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Other essential skills

Throughout the Unit learners will develop knowledge and skills which are specifically intended to encourage enterprise and initiative and to enhance their employability in the television sector of the creative Industries. Because these skills are readily transferable, they could also be applied to many other areas of employment such as film, photography, advertising or video production.

History of changes to Unit

Version	Description of change	Date

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General information for learners

Unit title: Camera: Selection, Mounts and Advanced Functions

This section will help you decide whether this is the Unit for you by explaining what the Unit is about, what you should know or be able to do before you start, what you will need to do during the Unit and opportunities for further learning and employment.

This Unit is designed to provide you with the Knowledge and/or Skills necessary to use a camera within a production environment.

You will learn about and be responsible for evaluating the features and components of a variety of cameras as well as where, and how, to source them.

You will also learn how to select and use a range of camera mountings and accessories to produce high quality images.

Finally you will plan a shoot and gather footage suitable for use in an edited sequence to meet the requirements of a given production brief.

You will be assessed on the standard of the camera footage you have produced, the standard of your records and paperwork and the standard of your reports, including analysis and evaluation.