Higher National Unit specification

General information

Unit title: Lighting: A Single Camera Location

Unit code: H4A9 35

Superclass: KF

Publication date: June 2013

Source: Scottish Qualifications Authority

Version: 01

Unit purpose

This Unit is designed to provide learners with the knowledge and skills necessary to rig lighting to meet the requirements of a given production brief. This will include: assessing the types of lighting required for a given location, rigging and de-rigging lighting systems and applying lighting techniques to meet production and location requirements brief.

Outcomes

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

1 Describe electrical principles associated with TV lighting on location.
2 Rig and de-rig lighting systems to meet production and location requirements.
3 Apply lighting techniques to meet the requirements of a given production brief.

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 is at the discretion of the centre. No prior Knowledge and/or Skills in the use of lighting are required. However, it is recommended that learners do have some prior knowledge and skills in TV lighting techniques. This may be evidenced by possessing the Unit *Lighting: 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.

Outcome 1

Describe electrical principles associated with TV lighting on location.

Knowledge and/or Skills

- Principles of Electricity, AC and DC including conductors and insulators
- Ohm's Law, electrical power
- Electrical safety devices such as fuses and circuit breakers
- Use of cables and connectors
- Health and Safety requirements

Outcome 2

Rig and de-rig lighting systems to meet production and location requirements.

Knowledge and/or Skills

- Use and operation of portable rigging equipment
- Use and operation of selected luminaires including fittings such as diffusers
- Health and Safety
- Pre-light and focus luminaires prior to recording

Outcome 3

Apply lighting techniques to meet the requirements of a given production brief.

Knowledge and/or Skills

- Production planning meeting
- How to select appropriate luminaires
- Production of a location lighting plot
- Location lighting effects and how to achieve them
- Contribute as a member of a production team
- Health and Safety requirements

Higher National Unit specification: General information (cont)

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Evidence Requirements for this Unit

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

Produce recorded material of two lighting set ups that have met the requirements of a brief plus the necessary documentation.

For **Outcome 1**, answering a range of short response questions that clearly assess the knowledge of the learner in relation to questions referring to parallel and series circuits, Ohm's Law, cable and fuse sizes, different connectors and cables together with electrical load of luminaires and power distribution.

For **Outcome 2** will be assessed by relevant documentation for a lighting set up at a given location listing all the electrical and lighting equipment required. Learners will undertake the safe rigging and de-rigging of equipment in response to a given lighting plot together with a record of total electrical load and load distribution.

For **Outcome 3**, learners will be required to produce relevant documentation a lighting set up at a given location together with recorded sequences that meet the requirements of the production brief.

Notes to Centres — The lighting set up and location can be wide ranging, eg the location may be a house and the lighting sett ups may be in a kitchen and the sitting room.

Documentation for Outcomes 2 and 3 will include the following:

- Planning meeting notes.
- Location site surveys reports.
- Risk Assessment reports.
- A detailed lighting plot.
- A detailed list of all lighting and electrical equipment required for the lighting set up.

The completed site survey reports must describe the size and type of location including the fabric of buildings taking into account design constraints. The learner must advise the production team accordingly.

The learner must be able to:

- Identify electrical power sources for the use of the luminaires.
- Calculate number and type of luminaires that can be used safely within a ring circuit.
- Incorporate a reasonable time allocation for the pre-lighting and de-rigging of the selected lighting system.

The risk assessments should include recommendations for working at height or applying portable rigging equipment on the site. Learners must adhere to Health and Safety requirements and work within these constraints on location.

Higher National Unit Support Notes

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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 Unit is primarily intended to prepare learners with the knowledge, understanding and skills essential to work within a production team environment. It is unlikely but not impossible for this Unit to be delivered as a free standing Unit. An individual could possibly undertake this Unit if there was an opportunity to be a member of a production team while engaged on a work placement or if the institution itself could provide a viable project in the work place. The learner is most likely to function on a legitimate (course) production to achieve the Unit.

The Unit should build on the knowledge and skills already introduced and developed in the Unit *Lighting: An Introduction* and prepare learners with the skills and knowledge that they would be likely to use in either freelance or full time employment.

Outcome 1 deals with electrical lighting principles and practice and should prepare the learner with the knowledge and understanding of these principles in order to safely configure and utilise a range of lighting equipment. It also brings into context the necessity for Health and Safety checks on equipment and the potential hazards that may await the user. This Outcome also covers how the lighting operator can calculate safe electrical loads on a circuit before accessing any lighting equipment. Learners could be asked to develop their own lists of equipment and potential safety concerns before they are introduced to formal exemplar materials.

In **Outcome 2** the learner is starting to put together all the knowledge and understanding while compiling a list of equipment and materials to carry out a specific lighting project. The learner will first assess the given location and compile a report as to the erection and suitability for lighting. S/he should be capable of demonstrating through the written report (reccee) that s/he has considered the full range of location constraints, possible lighting provisions and any health and safety issues.

The lecturer could meet regularly with the team acting in the role of producer. It may be easier to identify and advise on any areas where individuals are not meeting the requirements of the project or indeed the Unit. Requiring the team to produce regular 'minutes of meetings' for the producer/lecturer to review and offer feedback is another possible method of obtaining evidence that the learner is fulfilling her/his role within the team. It is envisaged that this Unit would run in tandem with a Unit in directing and single camera and as such would be integrated.

For **Outcome 3** it is essential that prior to commencing a project, all production documents such as booking forms for equipment are vetted by the lecturer. In some cases asking for this documentation a week before the shoot date is helpful to ensure that all appropriate paper work and procedures have been followed.

It is unlikely that under normal circumstances the lecturer will be available to witness performance by the learner for all of the production however it is imperative that at least one practical assessment of the learner's abilities and awareness of Health and Safety issues are observed and recorded by the lecturer. It is also important that the learner adhere to deadlines set by the production schedule and the class lecturer. The learner should rig the lighting while following the director's production treatment and style.

Guidance on approaches to delivery of this Unit

This Unit is part of the HNC/HND Creative Industries*: Television* and ideally could be delivered in conjunction with other Units making up the Group Award. These Units are *Television Directing: Directing Factual, Programmes and Television Directing: Directing Non Factual Programmes* and *Using a Single Camera in a Television Production Team*.

It is unlikely but not impossible for this Unit to be delivered as free standing. An individual could possibly undertake this Unit if there was an opportunity to be a member of a production team while engaged on a work placement or if the institution itself could provide a viable project in the work place.

Guidance on approaches to assessment of this Unit

Evidence can be generated using different types of instruments of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Assessment for Outcome I could be closed-book with the learner answering a series of short response questions relating to the skills and knowledge requirements of the Outcome. There should be questions that require the learner to calculate equations by electrical formulas and diagrams.

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Assessment of Outcomes 2 and 3 could be integrated with other Units being undertaken simultaneously by the learner (or free standing) while the learner is working with other learners on a full production. To enhance the learners' understanding and encourage confidence it is recommended that meetings be arranged and feedback given at regular intervals throughout the process.

Learners should provide recorded sequences of programme acquisition from a location and the corresponding production documentation.

The completed site survey reports must describe the size and type of location, fabric of buildings, taking into account design constraints, and the learner must advise the production team accordingly. The learner must be able to identify electrical power sources for the use of the luminaries, calculate number and type of luminaires that can be used safely within a ring circuit, and incorporate a reasonable time allocation for the pre-lighting and de-rigging of the selected lighting system.

The risk assessments should include recommendations for working at height or applying portable rigging equipment on the site.

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/assessment approaches adopted, all Outcomes of this Unit provide opportunities for developing the three components of the *Communication* at SCQF level 6 and two components of *Problem Solving* at SCQF level 6, one of *Working with Others* at SCQF level 6 and one of *Numeracy* at SCQF level 5.

Communication: Oral Communication at SCQF level 6

Learners will need to convey information, ideas and opinions accurately, coherently and succinctly using vocabulary and language structures appropriate to the audience. If contributing orally to discussion, they will respond to others and take account of their contributions. On occasion learners will also need to ask pertinent questions, seek clarification of instructions and consider and evaluate received responses.

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Communication: Written Communication (Writing) at SCQF level 6

For Outcome 1, learners will be required to answer a range of short response questions that clearly assess the learners' knowledge of, for example, parallel and series circuits, Ohms Law, cable and fuse sizes, different connecters and cables together with electrical load of luminaires and power distribution. This will involve the use of technical and complex language.

In addition, for Outcome 2 and 3, learners will be required to complete site survey reports which describe the size and type of location, fabric of buildings and take into account design constraints.

Communication: Written Communication (Reading) at SCQF level 6

This Unit requires learners to operate different types of equipment, which will involve reading instructions, operating manuals or other informative and explanatory text, including information about health and safety. They will use the information gained to make decisions about the selection of equipment and accessories.

Problem Solving: Critical Thinking at SCQF level 6

Learners will have to analyse a brief and identify an effective approach to the task. Before doing this they will need to consider alternative ways of doing it and assess the advantages and disadvantages of each. Relevant information and a variety of factors will need to be identified and analysed in order to produce a satisfactory solution to the brief.

The learner must be able to identify electrical power sources for the use of the luminaries, calculate number and type of luminaires that can be used safely within a ring circuit, and incorporate a reasonable time allocation for the pre-lighting and de-rigging of the selected lighting system. Learners will also be required to undertake risk assessments.

Learners will be required to adhere to Health and Safety requirements and work within these constraints on location

Problem Solving: Planning and Organising at SCQF level 6

Before starting the task, learners will need to plan their approach. This will involve generating a number of ideas and selecting the best combinations of equipment, positions, etc for including in the final set-up.

Numeracy: Using Numb*er* at SCQF level 5

This Unit requires learners to carry out a range of numerical skills in specialised situations. The learner must be able to identify electrical power sources for the use of the luminaries, calculate number and type of luminaires that can be used safely within a ring circuit, and incorporate a reasonable time allocation for the pre-lighting and de-rigging of the selected lighting system.

Accuracy will be essential as errors have significant Health and Safety implications for both learners and colleagues.

Higher National Unit: Support Notes (cont)

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Information and Communication Technology (ICT): **Accessing Information at SCQF level 6**

In order to complete the Unit, learners will be required to carry out research relevant to their given brief. This is likely to involve the use of a range of ICT equipment and learners may need to carry out complex searches for information relevant to the given brief. Learners are also likely to need to ensure that the data for their project is kept secure and well managed

Information and Communication Technology (ICT): **Providing/Creating Information at SCQF level 6**

Learners are likely to use ICT for Outcomes 2 and 3. Learners are required to produce the following documentation:

- Planning meeting notes.
- Location site surveys reports.
- Risk Assessment reports.
- Two Lighting plots.
- A detailed list of all lighting and electrical equipment required for two lighting set ups.

These documents are likely to be created using ICT.

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

Throughout the Unit, learners will be required to work co-operatively with others to ensure the successful completion of the assignment to the given brief. Learners will work as part of a production team and will be involved in analysing their own role and the other roles that are required for successful completion of the project. The need to organise themselves and others in the production process is likely to be an important aspect of the successful completion of the Unit. This is likely to involve negotiation with other learners providing services in, for example, camera, sound and directing.

Team members are required to produce regular minutes of meetings.
Throughout the Unit learners will develop knowledge and skills which are specifically intended to enhance their employability as a lighting person in the Creative Industries sector. Because these and other soft skills such as punctuality, presentability and efficient time management are readily transferable, they could also be applied to many other media and areas of employment such as photography and film and video making.

History of changes to Unit

Version	Description of change	Date

General information for learners

Unit title: Lighting: A Single Camera Location

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 will enable you to demonstrate your skills as a lighting operator and provide you with a broad understanding of the role and responsibilities of the lighting operator working on a single camera production shoot. You should possess sound background knowledge of electrical principles and their applications, which will enable you to produce a site survey report for a given location and ensure that lighting is used appropriately and safely.

You will be responsible for considering the logistics of the chosen location as well as the Health and Safety of others at work on location. The project director should be updated and consulted at every stage to ensure that as a team any lighting issues or concerns are identified and resolved as soon as possible. After you have completed your lighting location survey report, you should order the appropriate luminaries and lighting accessories, taking into account the financial implications and restrictions of the production budget. All electrical appliances and luminaires should be checked before dispatch, including any hire equipment or accessories being used. You must maintain a checklist of all lighting equipment used during the production, using a director's shoot list for reference as this would include the style and look that the director was attempting to achieve.

You will then be responsible for rigging the luminaires and possibly supervising other production crew members as this task is carried out. You will carry out a preliminary lighting check to ensure that the appropriate coverage and style is achievable using your chosen lighting system. It is also important to work closely with the camera operator to line up the 'monitor' being used by the director to ensure true colour balance and contrast levels for the monitor, and consider both the aesthetic elements of the scene and the technical parameters of the recording system. You will also monitor the scenes and make suggestions to both the director and or the camera operator if any changes are required.

When shooting is finished for the day, you will then be responsible for ensuring that all the luminaires are safely de-rigged and that all lighting accessories are dismantled and packed away. A lighting equipment checklist is essential here to ensure that all the equipment used is accounted for and ready for removal.