



Higher National Unit specification

General information for centres

Unit title: Stage Lighting: Rigging, Focusing and Operation

Unit code: F388 34

Unit purpose: This Unit is designed to provide candidates with practical experience and an understanding of the theory and processes of lighting within a stage production. It is primarily intended for candidates who wish to work as technical practitioners within the theatre/entertainment industry.

On completion of the Unit the candidate should be able to:

- 1 Prepare resources for implementation of lighting design.
- 2 Rig and focus stage lighting.
- 3 Plot stage lighting.
- 4 Operate stage lighting control systems.

Credit points and level: 2 HN credits at SCQF level 7: (16 SCQF credit points at SCQF level 7*)

**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.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. However, it is recommended that candidates possess a basic knowledge and understanding of the technical roles within a theatrical production team. This may be evidenced by the achievement of one or more of the following NQ Units:

D12T 12 *Lighting: In-House Production*
D12V 12 *Lighting: Touring Production*

Core Skills: There are opportunities to develop the Core Skills of *Working with Others*, *Numeracy (Working with Numbers)*, *Problem Solving (Critical Thinking)*, *Communication*, and *Information Technology* at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

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. This Unit was developed within the framework of the HNC Technical Theatre.

General information for centres (cont)

Assessment: All Outcomes of this Unit could be assessed using the same assessment approach, requiring candidates to produce evidence of practical work undertaken and developed on a production. The candidates will perform lighting roles throughout the production processes and practical performance will be recorded against a series of observation checklists. Candidates will also be required to submit completed lighting plans, cue lists, focus plots and other relevant paperwork.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

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. Candidates 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

Prepare resources for implementation of lighting design

Knowledge and/or Skills

- ◆ Lantern types
- ◆ Basic testing and maintenance of lanterns
- ◆ Common accessories
- ◆ Lighting plans and colour call sheets
- ◆ Lighting designs
- ◆ Lighting rig preparation
- ◆ Health and safety procedures

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by undertaking a small lighting project. Candidates will be given a simple lighting design comprising three different lighting states (eg for three different scenes) for which the correct resources should be prepared and discussed with the tutor.

A candidate's response can be judged to be satisfactory where the evidence indicates that the candidate is able to:

- ◆ identify the five basic lantern types to implement the design
- ◆ describe the different uses for the five basic lantern types
- ◆ demonstrate basic tests and maintenance of each type of lantern
- ◆ demonstrate correct and safe use of common accessories
- ◆ interpret a simple lighting design including lighting plan and colour call sheet in preparation for rigging
- ◆ apply health and safety procedures throughout

(The five basic types of theatre lantern are assumed to be: Profile, Fresnel, PC, PARCan (or other Beamlight) and Flood.)

Higher National Unit specification: statement of standards (cont)

Unit title: Stage Lighting: Rigging, Focusing and Operation

Assessment Guidelines

The assessment of this Outcome could be integrated with the assessment for Outcomes 2, 3 and 4. Evidence could be recorded on an observation checklist.

Outcome 2

Rig and focus stage lighting

Knowledge and/or Skills

- ◆ Lighting plan
- ◆ Access equipment
- ◆ Lantern hanging procedures
- ◆ Accessories
- ◆ Cabling and circuiting requirements
- ◆ Faults and problems
- ◆ Focus notes
- ◆ De-rigging and storing lighting and equipment
- ◆ Health and safety procedures

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by undertaking the rigging and focusing of stage lighting based on a given lighting plan for a show.

A candidate's response can be judged to be satisfactory where the evidence indicates that the candidate is able to:

- ◆ read a lighting plan
- ◆ demonstrate safe use of access equipment
- ◆ hang lanterns
- ◆ attach accessories
- ◆ implement cabling and circuit requirements
- ◆ locate and repair faults and problems with the lighting rig
- ◆ focus and colour lanterns
- ◆ prepare and use focus notes
- ◆ de-rig and store lighting and other equipment safely
- ◆ apply health and safety procedures throughout

Assessment Guidelines

The assessment of this Outcome could be integrated with the assessment for Outcomes 1, 3 and 4. Observation checklists could be used to record evidence of the candidate's performance on an on-going basis throughout the rigging, and focusing of stage lighting for a show. The show could be a drama, musical or dance production.

Higher National Unit specification: statement of standards (cont)

Unit title: Stage Lighting: Rigging, Focusing and Operation

Outcome 3

Plot stage lighting

Knowledge and/or Skills

- ◆ Lighting board layout and functions
- ◆ Recording of cues into memory
- ◆ Cue sheets for manual and memory operation
- ◆ Re-plotting and adjustments to cues
- ◆ Health and safety procedures

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by undertaking the plotting of stage lighting for a show.

A candidate's response can be judged to be satisfactory where the evidence indicates that the candidate is able to:

- ◆ set up a lighting board
- ◆ demonstrate the manual functions of the lighting board
- ◆ create and maintain a manual cue sheet of at least 12 cues
- ◆ record at least 12 cues into memory
- ◆ create and maintain a memory cue sheet of at least 12 cues
- ◆ demonstrate re-plots and adjustments to cues
- ◆ apply Health and Safety procedures throughout

Assessment Guidelines

The assessment of this Outcome could be integrated with the assessment for Outcomes 1, 2 and 4. Observational checklists could be used to record evidence of the candidate's performance on an on-going basis throughout a lighting plot phase of a show. The show could be a drama, musical or dance production.

Outcome 4

Operate stage lighting control systems

Knowledge and/or Skills

- ◆ Components and features of the lighting control system
- ◆ Pre-show checklist
- ◆ Pre-show checks
- ◆ Lighting rig maintenance
- ◆ Operation skills during the show
- ◆ Communication skills
- ◆ Health and safety procedures

Higher National Unit specification: statement of standards (cont)

Unit title: Stage Lighting: Rigging, Focusing and Operation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by undertaking the role of Lighting Operator during the dress rehearsal and performance phase of a production.

A candidate's response can be judged to be satisfactory where the evidence indicates that the candidate is able to:

- ◆ identify the components and features of the lighting control system
- ◆ create a pre-show checklist
- ◆ demonstrate appropriate pre-show checks
- ◆ identify problems and act appropriately to maintain the lighting rig
- ◆ operate the show lighting from a cue list or other notes as appropriate
- ◆ communicate clearly, accurately and effectively with team members and colleagues
- ◆ apply appropriate health and safety procedures throughout

Assessment Guidelines

The assessment of this Outcome could be integrated with the assessment for Outcomes 1, 2 and 3. Observational checklists could be used to record evidence of the candidate's performance on an on-going basis throughout the run of a show. Where faults, mistakes and problems occur there are opportunities for assessment, but when they do not the tutor should instead offer candidates assessment opportunities in the solving of typical problems in a classroom setting. The show could be a drama, musical or dance production.

Administrative Information

Unit code: F388 34

Unit title: Stage Lighting: Rigging, Focusing and Operation

Superclass category: LE

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Higher National Unit specification: support notes

Unit title: Stage Lighting: Rigging, Focusing and Operation

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 80 hours.

Guidance on the content and context for this Unit

This Unit is intended to develop the candidate's stage lighting skills throughout the phases of a production. It is also intended to develop the candidate's skills in seeking career development within the theatre industry. The candidate should develop generic skills of stage lighting technicians. It should be explained to the candidate that certain duties are conventionally carried out by specific lighting personnel but the allocation of specific duties vary dependant on size and operation of the theatre company. This applies throughout the Outcomes.

In Outcome 1 the candidate should develop skills in the pre-production phase of a production, joining the team creating the production and taking part in production meetings and discussions. Once a lighting plan for the production exists the candidate should begin the practical work of gathering the resources needed for the implementation of that plan. The five basic types of lantern are assumed to be: Profile, Fresnel, PC, PARCan (or other beamlight) and Flood. 'Basic maintenance' should include at least: a simple 'flash test' (ie plug it in and see if it lights up) and tasks like visual safety checks, changing a lamp and cleaning lenses. 'Common accessories' is assumed to cover at least: Barndoors, Shutters, Colour Frames, Gobos, and Safety Chains.

Health and safety issues should be discussed where appropriate, particularly in relation to current legislation for electrical safety.

In Outcome 2 the candidate should develop the required skills during the rigging and focusing stages of a production, and also during the strike. They will be involved in the hanging and focusing of the lanterns as guided by the lighting plan and a Lighting Designer where present. At the end of the production process they should participate in the de-rigging and storing of lighting equipment and returns of any borrowed items of lighting equipment.

Health and safety issues should be discussed where appropriate, particularly in relation to current legislation for access equipment, electrical safety and working at height.

In Outcome 3 the candidate should develop skills during the plotting sessions and technical rehearsals for a production, working with the Lighting Designer where present and the Director to record lighting states for the production. The candidate should then continue the process of re-plotting and adjusting the lighting as needed during the subsequent rehearsals.

Health and safety issues should be discussed where appropriate, such as the responsibility of the lighting operator to ensure any sudden blackouts are known about by all working in the area.

In Outcome 4 the candidate should develop skills during the dress rehearsals and performances of the production. The candidate should perform pre-show checks in good time to correct any faults and maintain the lighting rig, and operate the lighting in the performance either from their own notes or as called by a Stage Manager on the book.

Health and safety issues should be discussed where appropriate.

Higher National Unit specification: support notes (cont)

Unit title: Stage Lighting: Rigging, Focusing and Operation

Guidance on the delivery and assessment of this Unit

This Unit is a mandatory Unit in the HNC Technical Theatre Group Award.

It is primarily intended to provide candidates with the necessary skills to carry out various roles within the technical area of Stage Lighting. The Unit may be incorporated within public performance productions which will allow the candidate to experience 'real' situations. If no live performance is available for the candidate to work on, or in the event of a candidate needing to re-attempt all or part of the Unit the candidate could also develop skills in a simulated exercise which tries to closely emulate the conditions of a live performance.

Assessment should be on an on-going basis, where relevant, throughout the delivery of the Unit and at times when the tutor feels that the candidate is ready to be assessed. An evaluation of the process could be submitted. On-going assessment of practical activity may be recorded using observation checklists.

Opportunities for developing Core Skills

Opportunities could be taken to develop the skills of *Oral* and *Written Communication* in discussions with the production team, any by writing and email throughout all Outcomes. Candidates will be able to develop their *Problem Solving (Critical Thinking)* by participating in production planning meetings and discussions and communicate with their director and fellow team members in rehearsals and during shows. Candidates will also use rehearsal notes and other reference materials in their planning and create their own lists, notes and cue sheets which could involve the use of *Numeracy (Working with Numbers)* and *Information Technology*.

If candidates deal with circuit numbers, channel numbers and loading sums, developing their understanding of mathematics, Ohms law and other relevant electrical formulae then they will have opportunities to develop the Core Skill of *Numeracy (Working with Numbers)* at SCQF level 5.

As the candidates trace problems they may develop systematic fault finding skills and will be encouraged in the process of budgeting limited lanterns, circuits and other equipment. These will give the candidates the opportunities to develop the Core Skill of *Problem Solving (Critical Thinking)* at SCQF level 5.

If candidates use paperwork such as rehearsal notes, lighting plans, colour calls and equipment lists then they will have opportunities to develop the Core Skill of *Communication (Written)* at SCQF level 5.

If candidates deal with production issues which will often be addressed orally in meetings and informal discussions, and if candidates use professional verbal communication techniques during technical rehearsals and shows, then they will have opportunities to develop the Core Skill of *Communication (Oral)* at SCQF level 5.

If candidates use CAD programmes, as well as producing paperwork on computers, they will have opportunities to develop the Core Skill of *Information Technology* at SCQF level 5.

As team work is integral to the role of stage lighting technician within a theatrical environment, the candidate will have opportunities to develop the Core Skill of *Working with Others* at SCQF level 5.

Higher National Unit specification: support notes (cont)

Unit title: Stage Lighting: Rigging, Focusing and Operation

Open learning

The Outcomes in this Unit rely on developing skills through participation during and throughout the phases of a production. Candidates will be required to communicate with production personnel on an active and on-going basis, and to physically participate in the practical aspects of rigging, focusing and operation. Therefore opportunities for distance learning are extremely limited. Centres may, however find it possible to develop solutions, provided all Unit and verification requirements are met in full. Technological advances may make the possibility of such creative solutions more widespread in the future.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

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This Unit is primarily intended to develop your skills in stage lighting within a theatrical environment.

In Outcome 1 you will learn to use a lighting plan to prepare for the lighting of a show. You will learn to identify, describe and use the five basic types of theatre lantern (Profiles, Fresnels, PCs, PARCans and Floods) and some common accessories used with them in theatre lighting. You will learn how to perform basic maintenance of these lanterns, after checking them for faults. You will learn about colour and how to prepare colour filters for rigging. Throughout all of the work you will be learning about professional working methods and safe working practices.

In Outcome 2 you will learn to rig lights, reading from a lighting plan to show you where each lantern goes, how it should be plugged up, and what accessories and colour it needs. You will learn to safely use access equipment to rig and focus at height, and how to test your lighting rig for faults and fix any that are found. You will also learn how to focus lights to illuminate the stage, and how to take notes on this process for later use. Lastly you will learn how to de-rig and store lanterns after all the performances have finished.

In Outcome 3 you will learn to use a lighting control board for both manual and memory operation of lighting. You will create cue sheets for both types of operation, and record and edit lighting cues in the memory of the lighting board.

In Outcome 4 you will learn to play back these lighting cues during the run of a performance. You will learn how to create and use a list of checks to be carried out before each show and work from this and your cue sheets to ensure the shows run smoothly and safely. You will have opportunities to increase your communication skills throughout the process as you learn professional communication techniques during the running of shows.

The assessment of your work in Outcomes 1–4 will be on an on-going basis and involve the observation of your practical abilities in carrying out the above tasks before, during and after a stage production.