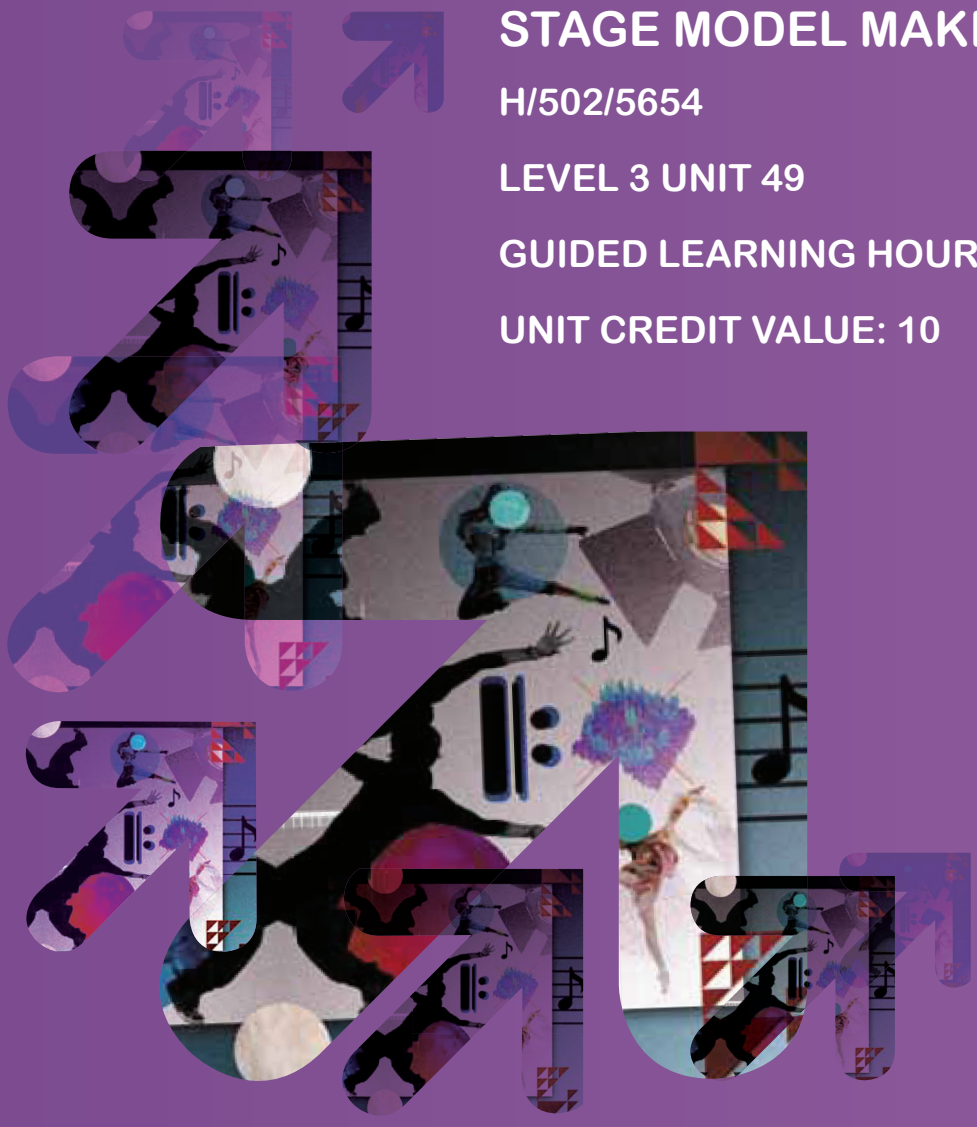
Cambridge TECHNICALS

Accredited

OCR LEVEL 3 CAMBRIDGE TECHNICAL

CERTIFICATE/DIPLOMA IN

PERFORMING ARTS



STAGE MODEL MAKING

H/502/5654

LEVEL 3 UNIT 49

GUIDED LEARNING HOURS: 60

UNIT CREDIT VALUE: 10

OCR

STAGE MODEL MAKING

H/502/5654

LEVEL 3 UNIT 49

AIM OF UNIT

The purpose of this unit is to enable aspirant designers or designer's assistants to produce stage models that provide the director, cast and technical crew with a clear idea of what the finished set is intended to look like and how it will function. They must understand that all aspects of the actual stage are relevant and thus they need to be aware, for example, of positions of key features such as the proscenium arch, back wall and any access, weight or height restrictions. although the designer is responsible for ensuring the design conforms to these parameters, the model maker or designer's assistant often has to interpret and make minor adjustments to the design in order to make things 'work' and, consequently, the model is an essential aid to all other departments in determining whether any given feature is practicable in production.

Learners will need to be taught how to measure accurately and how to transfer measurements to paper or CAD according to a given scale and in strict observance of the specified stage area. They should also be introduced to a range of model–making techniques and materials so that they are able to construct both the White Card model and also the final model box, complete with texture, colour and decorative finishes. They will also require basic woodworking skills, especially where they are constructing the box frame into which the model will fit. They should also be shown how they can construct a mini-lighting array using low voltage LED's so that they may demonstrate how the set will look under specific lighting conditions. Additionally, they should consider how they are going to represent performers in the model and if figures should be given realistic characteristics or be simply representational.

Learners must also be able to demonstrate the workings of the set by using the model and should be able to present these to director, cast and crew, answering questions as they go. In some cases, depending upon the complexity of the set, they may need to enlist and train one or two helpers who will manipulate the model elements as the model maker talks through the various scene changes etc. Above all, model makers should make it their objective to produce a model that is 'fit for purpose'. **Models should be Clean, Precise and Accurate**. There is no better way of doing this then by studying closely how professionals go about the construction process.

ASSESSMENT AND GRADING CRITERIA

Learning Outcome (LO) The learner will:	Pass The assessment criteria are the pass requirements for this unit. The learner can:	Merit To achieve a merit the evidence must show that, in addition to the pass criteria, the learner is able to:	Distinction To achieve a distinction the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
1 Know how to use technical model-making skills	P1 describe how scale measuring and cutting skills should be used		
2 Know how to select and use appropriate model-making materials	P2 describe how to select and use some scale model – making materials		
3 Be able to construct a scale set design in a scale model box	P3 use measuring and cutting skills to construct a mostly accurate scale model box	M1 use measuring and cutting skills to construct an accurate scale final model box capable of showing how scene changes may be effected	
4 Be able to use decorative finishes on the scale model box	P4 decorate the model box with decorative finishes that echo the design intentions	M2 use the completed final model box to demonstrate the main design features of the set	D1 present the completed final model to director, performers and technical crew explaining how the designer's intentions have been realised

TEACHING CONTENT

Know how to use technical model making skills

Learners will be familiar with:

The use of drafting tools, i.e. scale ruler, square set, protractor, compass, templates, curves, CAD (if available) etc.

A range of construction skills, e.g. measuring, scaling, cutting, scoring, abrading, joining, gluing etc.

Know how to select and use appropriate model making materials

Learners will be familiar with:

A range of tools and equipment, e.g. craft knives, saws, abrasives, spatulas, brushes, hot wire cutters, adhesives, glue guns etc.

And materials, e.g. pins, staples, wood, balsa wood, cork, foam board fabric, card, plastic, polystyrene etc.

Be able to construct a scale set design in a scale model box

Learners must:

- Follow a design brief related to a specified production
- Produce a floor plan to scale for a specified stage either on paper or in CAD
- Select materials and equipment
- Cut, shape assemble and secure a White Card model box accurately
- Incorporate movable or articulated elements
- Show how the various elements interact to facilitate changes.

Be able to use decorative finishes on the scale model box

Learners will be familiar with:

A range of decorative finishes, e.g. texturing, stippling, stencilling, etching, colouring, varnishing.

Learners must:

- Follow a design brief related to a specified production
- Identify appropriate materials and techniques
- Identify methods of application
- Apply appropriate materials and techniques
- Consider the effect of lighting on the completed design objective
- Show how each of the elements combine to achieve the design intention.

NB The application of decorative finishes must be to the final version of the model and NOT the White Card version.

DELIVERY GUIDANCE

Know how to use technical model making skills

It is recognised that learners will not have the time to learn about and become adept in the use of the full range of techniques and materials available.

Nonetheless, it is necessary for them to have ample opportunity to become familiar with the most commonly used materials and construction methods in model box construction. They should be given plenty of opportunity to experiment with materials but always under supervision. This is important becomes many of the tools and materials can be hazardous and it is therefore essential that safe working practices are firmly instilled before learners are given the freedom to work unsupervised. Continuous feedback by the teacher is essential and where learners do not meet the standard at any given stage of construction it is preferable that they are prevented from continuing to the next before they have rectified things. This is an important consideration since a model which has construction flaws at any stage of the process will not stand up to later modification or indeed transportation or demonstration.

Know how to select and use appropriate model making materials

It is vital that the model produced exactly replicates the scale, dimensions and construction details of the intended theatrical production. All sets are constructed to fit onto the stage of a specific venue(s) and the model must reflect this. Consequently, model makers need to understand how to take critical measurements of the stage and transfer these to paper or CAD prior to constructing the model. Model makers should also appreciate that when the model is constructed, it must also take into account any scenery that is to be stored in the wings and how this will be brought on in order to effect scene changes. Undoubtedly, the best way to achieve this is to augment practical workshop sessions at home with opportunities to visit commercial set construction departments that are engaged in the business of manufacturing sets for use in the theatre, film and TV and re-enactment industries. Large theatre companies such as The National Theatre, The Royal Shakespeare Company, The Royal Ballet and The English National Opera all maintain archives and museum exhibits representing the finest examples of model box construction. Many of these also provide back stage tours and workshops where it is possible to talk to designers and constructors. Some universities and drama schools also run specialist set design and construction courses where it may be possible to view examples of work in progress. Wherever possible, learners should be exposed to professional standards and encouraged to consider their model making in terms of 'fit for purpose'. It should be noted that at this level any model that is flimsy, inaccurate or poorly finished is unlikely to meet the required benchmark. Following industry practice, a 'White Card' version should be used as a preliminary stage to inform the construction of the definitive model to be used in the final presentation.

Be able to use decorative finishes on the scale model box

It is important for learners to appreciate what finishes are appropriate for application to a model structure. Obviously, some solvents and other substances, although perfectly suitable, for application to full scale sets, may have a detrimental effect on, say, white card. Polystyrene dissolves on contact with some paints and adhesives. Scale also presents problems to the constructor since, for example, some period wallpaper patterns only work at full scale and would look ridiculous if simply transferred wholesale to the model. The challenge for the constructor is to identify and adapt materials that will replicate as closely as possible the designer's intention. In the case of textures or decorative embellishment, adaptation of scale also needs to be taken into consideration and learners should be encouraged to consider the profile and the effect of lighting when they are reduced in scale. For example, a stippling of Pollyfilla may not achieve the effect of 15th century stucco specified by the designer. It should be noted that at LO4 and in keeping with industry practice, the requirement is to work with the final version of the model box. The final version model box should represent the ultimate development of the model and is the one that is used together with simulated stage lighting, using a min-rig, to brief the director, performers and construction team. It should therefore replicate as closely as possible the intended final full scale set.

Learners should be encouraged to consider their options before committing themselves and this means that they should experiment with sampling and test pieces at every stage. Only when they are completely satisfied that a particular technique will prove effective should they commit themselves to using it on the final model. It would be advisable for them to maintain a notebook in which they record their findings for future reference.

SUGGESTED ASSESSMENT SCENARIOS AND GUIDANCE ON ASSESSMENT

It is important that the construction workshop is well organised and well-stocked and that learners soon orientate themselves to the location of everything. At the beginning, it is expected that the teaching staff will demonstrate how to use equipment and materials but as soon as possible learners should be given the opportunity to explore. A good way to do this is for there to be a designated area set aside for this purpose with the most common construction tools and materials 'on demand'. Some constructors may wish to continue working on their models out of designated class time and therefore it would be helpful for provision to be made for them to transport their early component efforts, together with some materials, away with them.

Assessment and Grading Criteria P1

Learners should, from a range of options presented to them:

- identify by name items from a range of tools typically used in model construction
- explain what how each may be used under different circumstances.

This may be assessed by means of a Viva or a recorded interview/demonstration.

Given a series of practical mini-briefs, learners will, with guidance, complete an appropriate number of component test pieces or component elements using a range of tools. Learners must:

- demonstrate a range of construction techniques.

Mini-briefs should, wherever possible, focus on a single process or certainly, a narrow spectrum of skills and techniques and each brief should present a different challenge so that by the end of the process all the briefs will have covered collectively the whole construction process. The artefacts produced should form part of a portfolio of construction work to be assessed for accuracy and being 'fit for purpose'.

Assessment and Grading Criteria P2

Learners should, from a range of options presented to them:

- identify by name items from a range of materials typically used in model construction
- explain how each may be used.

This may be assessed by means of a Viva or a recorded interview/demonstration.

Given a series of practical mini-briefs, learners will with guidance, complete an appropriate number of component test pieces or component elements using a range of materials. Learners must:

- demonstrate a range of construction techniques.

Assessment and Grading Criteria P3

Given a design brief and under guidance learners will produce the following:

- a comprehensive survey of the specified stage area
- a floor plan to scale for the specified stage either on paper or in CAD
- an annotated list of suitable equipment and materials
- a fully assembled a White Card model box.

Assessment and Grading Criteria M1

Working to the design brief and including at least one scene change, learners will:

- without guidance, produce scale plans and construct a full specification final model box that is 'fit for purpose'
- demonstrate the main structural features of the set
- demonstrate how scene changes may be effected
- show how dormant scenic elements will be stored ready for introduction to the stage.

Assessment of the above will be in the form of a video – recorded presentation of the model.

Assessment and Grading Criteria P4

Learners should demonstrate a range of decorative techniques.

This may be assessed by means of a Viva or a recorded interview/demonstration.

Assessment and Grading Criteria M2

Working to the design brief centred learners will:

- without guidance apply decorative finishes to the final model box
- incorporate movable scenic elements to the final model box

Assessment of the above will be in the form of a video – recorded presentation of the model.

Assessment and Grading Criteria D1

Working to the design brief learners will:

- Incorporate a mini lighting rig into the final model box.
- present the model to director, performers and technical crew explaining how the designer's intentions have been realised
- answer questions with confidence and authority.

Assessment of the above will be in the form of a video recorded presentation of the model.

The video recordings cited above should record the complete construction process and the journey taken by the learner at each phase of development.

RESOURCES

www.youtube.com/watch?v=Ot4jcpzzVcE

www.youtube.com/watch?v=3i0DxUBndik

http://www.belgrade.co.uk/news-and-blogs/blogs/behind-the-scenes-of-mother-goose-model-box-pictur

http://www.harrogatetheatre.co.uk/panto/2010/09/28/the-design-process-stage-2-full-model-box

http://sandrarowney.blogspot.co.uk/2012/07/draft-model-box-designs-for-theatre.html

http://www.londonsartistquarter.org/content/brechts-turandot-ed-kemp-hampstead-theatre-model-box

LINKS TO NOS

Suite	Ref	National Occupational Standards
Craft	CCSCR9	Stage Model Making
Technical Theatre	CCSW6	Produce Scenic Works
Technical Theatre & Live Performance (Workshop)	CCSW7	Lead on the Production of Scenic Works

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