

Unit 82: Sculpture

Unit code:	Y/502/5344
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

This unit aims to give opportunities for the learner to develop skills and knowledge exploring sculptural processes in depth. Working from specialist sculptural briefs learners will research and develop ideas, exploring traditional and non-traditional materials towards the production of 3D sculptural pieces.

● Unit introduction

When meeting the requirements of commissions and briefs, sculptors need to develop and communicate ideas through a combination of 2D and 3D techniques. It is important that learners acquire skills in both these areas and develop knowledge and awareness of the work of others. Sculptors, whether working with traditional or non-traditional materials, need to gain an understanding of the materials with which they work in order to fully exploit their potential.

In this unit learners will develop an understanding of the importance of using appropriate tools and methods to achieve their creative intentions. Learners will explore sculptural approaches through experimentation with wide-ranging materials, techniques and processes. They will undertake relevant contextual research and demonstrate their understanding of the influences on their own work. Learners will recognise the importance of scale when producing drawings, models and maquettes in the processes of developing, reviewing and presenting ideas. They will develop sculptural ideas and concepts working within the constraints of realistic briefs and learn to communicate and evaluate their ideas and intentions to different audiences through appropriate presentation methods.

Briefs should be written and presented in a vocational context in order to encourage learners to work on realistic scenarios and outcomes, taking into account any relevant legal requirements such as health and safety issues and regulations in the use of sculptural media and construction techniques as appropriate.

● Learning outcomes

On completion of this unit a learner should:

- 1 Know about the physical properties and characteristics of sculptural materials
- 2 Be able to use sculptural techniques
- 3 Be able to use sculptural processes through creating and developing own designs
- 4 Be able to present a body of work to meet the requirements of a sculpture brief.

Unit content

1 Know about the physical properties and characteristics of sculptural materials

Physical properties: form; structure; qualities; aesthetic; material characteristics eg brittleness, malleability, porosity, rigidity, flexibility, weight, transparency, opacity, reflectivity, strength, texture, rigidity; surface qualities eg rough, smooth, graining, patina, translucent, opaque; tactile qualities eg rough, smooth, reflective, grained, patina; changing properties eg clay (plasticity, shrinkage, slip, plastic, leather-hard, bone dry, bisque fired), different properties (earthenware, stoneware, porcelain)

Sculptural materials: resistant eg wood, stone, plaster, wax, bronze, clay, concrete, resin, fibre glass, cement fondu; non-resistant eg clay, rubber, latex, sand, papers, tissue, newsprint, papier mache, feathers, straw, plant matter, textiles material, acrylic, acetate, viscose, PVC, cottons, wool, canvas, rope, wire, elastic, metal sheet, wire, foil, plaster;

recycled eg glass, cans, wire, stones, driftwood, acrylics, scrap metals, found objects

2 Be able to use sculptural techniques

Sculptural techniques: traditional eg carving, modelling, casting, moulding; non-traditional eg installation, assemblage, construction, welding, mobiles, CAD, ephemeral, conceptual; supporting techniques eg visualisation, development, drawing, sketching, photographing, maquette making, scanning

3 Be able to use sculptural processes through creating and developing own designs

Sculptural processes: initial ideas; sketches; CAD: drawings eg technical, perspective, conceptual, isometric; models eg maquettes, computer-generated, scale, concept, expressive, test pieces; constructing armatures; preparing moulds

Create designs: clarifying brief eg questioning, group discussions, research information, exploration, potential, alternatives; use sources (primary, secondary); develop ideas eg speculative drawings, models, maquettes, CAD, selection; refine eg modify, adjust

Health and safety: elimination of risk to self and others; thinking and working safely within a studio environment; following the appropriate COSHH guidance on materials; understanding risk assessments

4 Be able to present a body of work to meet the requirements of a sculpture brief

Requirements of the brief: eg client requirement, materials, ideas, processes, contextual references; development eg potential, limitations; visual language eg proportion, balance; design modifications; finished sculpture eg technical competence, detail, finish, function, weight, fitness for purpose; aesthetic; technical

Present a body of work: finished work eg stand alone, portfolio, displayed, mounted, on-screen, installed, in situ; presentation eg discussion, forum, individual, crit, seminar; audience eg peers, clients, tutors, colleagues; supporting work eg 2D visuals, 3D models, test pieces, sketchbooks, technical information, samples, maquettes, trial samples, annotated drawings

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the physical properties and characteristics of different sculptural materials [IE, SM, EP]	M1 apply diverse sculptural techniques coherently, identifying characteristics of different sculptural materials	D1 produce independently and present innovative responses that creatively exploit the potential of diverse sculptural materials and techniques.
P2 use sculptural techniques [CT, SM]	M2 present a body of work which effectively interprets the brief and demonstrates consistent skills and understanding of sculptural processes.	
P3 demonstrate sculptural processes through creating and developing own designs [CT, SM]		
P4 present a body of work to meet the requirements of a sculpture brief. [IE, RL, SM, EP]		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

This unit aims to give opportunities for the learner to explore and develop sculptural processes in depth. Working from specialist sculptural briefs learners will research and develop ideas, exploring traditional and non-traditional materials towards the production of 3D sculptural pieces.

Tasks set for this unit should introduce learners to a range of research and development techniques, to support the development of sculptural ideas. Tutors will need to plan a programme that encourages creative and experimental approaches in learners' responses to assignments set.

Introduction to learning outcomes 1 and 2, which are closely connected, can take the form of lectures introducing fine artists and their work. These sessions should introduce the learners to various concepts that are central to fine art practice and provide a basis for their research.

Learners will need to work from a theme as a basis for initial research and different sculptural ideas. From this, they might negotiate a personal brief on which to focus further research, and produce ideas for their own work. Research skills are a key part of this unit and learners will need to show a clear plan of how they intend to investigate their subject and theme. Learners should keep a record of all discussions with tutor/s and present a body of research in their sketchbooks or work journals. Where any changes to the plan are made, learners should provide clear evidence of how the decisions were reached and how they refined their research plan.

Tutors delivering this unit will need to provide specific practical, technical and contextual support to enable learners to originate and create sculptural work. As well as the development of practical skills through instruction and experimentation, learners should be encouraged to analyse and discuss their work in historical and theoretical contexts. Learners will need to evaluate their actions and outcomes and keep a record of their self-appraisal.

This unit will require the support of a well-equipped 3D design workshop. Learners will need access to a variety of hand-held and powered tools, modelling and moulding materials and amenities. Learners should be taught how to minimise risks, to themselves and others, through the thoughtful and safe use of tools and related equipment.

This unit has been designed to provide tutors with the opportunity to engage learners in realistic projects through the presentation of professional briefs. Projects should be set to reflect current professional practice and should be set to allow the use of a wide range of media, materials and processes. Learners should be introduced to contemporary developments in sculptural ideas and where appropriate be encouraged to experiment in similar ways. To motivate, inspire and stimulate learners, tutors should use briefs that set out realistic scenarios such as creating sculptural pieces for specific areas in the local environment.

Learning outcomes 1 and 2 offer the chance to learn about the fundamental elements and processes of sculpture. These two learning outcomes should be integrated with learning outcome 3 where learners research and explore sculptural materials within the context of a brief or a theme. The learners will explore the physical properties of materials and the techniques and processes involved. Learners should be encouraged to test these through a combination of instruction, demonstrations and individual exploration to create test pieces, maquettes and other pre-production models or mock-ups. Learning outcome 1 should be supported by theoretical study of material properties, whilst learning outcome 2 would best be supported through instruction and practical workshop experience.

Learning outcome 3 follows on from learning outcomes 1 and 2 by the practical application of materials, techniques and processes in the larger framework of developing and realising ideas. Learners should be encouraged to plan and develop ideas in 2D, through technical or scale drawings and working sketches, as well as 3D mock-ups in other materials. They should be taught to create presentation visuals and text in order to show the work in location and to promote an idea to clients.

Learning outcome 4 should draw together the learners' initial research and development, together with the final sculptural outcomes. Learners should be made aware of the commission process, the importance of working to deadlines and interpreting briefs in order to satisfy client requirements. Learners will need to be taught the necessary skills to enable them to present a professional response to clients as well as the practical skills required to produce sculpture and its supporting models and drawings.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to unit. Assignment 1: A Sense of Place Introduction to the brief/explore aims and requirements of the unit. <ul style="list-style-type: none"> Project launch and suggested breakdown of tasks; theme: a sculpture evoking a sense of place.
Selecting potential media: <ul style="list-style-type: none"> identify and review the properties/qualities of a range of appropriate sculptural materials evaluate potential use and suitability of selected sculptural materials for the project.
Exploration and experimentation: <ul style="list-style-type: none"> explore a range of appropriate traditional sculptural techniques experiment with a range of appropriate non-traditional sculptural techniques.
Learner initiated study.
Designing and maquette creation: <ul style="list-style-type: none"> generate and develop ideas using a range of appropriate sculptural methods produce a range of sculptural studies, models/maquettes.
Learner initiated study.
Presentation of design ideas and sample models: <ul style="list-style-type: none"> review and evaluate developmental studies present to peers and tutor and respond appropriately to feedback.
Refining and completing final sculptural piece: <ul style="list-style-type: none"> select and develop final idea using appropriate sculptural methods and techniques produce final sculptural work.
Learner initiated study.
Final presentation of completed brief: <ul style="list-style-type: none"> plan, and create a presentation of the work as a whole present appropriately to different audiences.
Review of unit and assessment.

Assessment

For P1, learners need to demonstrate their awareness of the properties and applications of sculptural materials. They will need to show they can list these properties and know about their influence on form and structure as well as their suitability with regard to final outcomes. Learners should demonstrate their knowledge of the physical and aesthetic qualities of individual materials.

For P2, learners need to demonstrate working with both traditional and non-traditional sculptural materials, utilising appropriate tools as necessary, together with any supporting processes. Assessment evidence for P1 and P2 will primarily be generated through a combination of practical work supported by written research and annotated worksheets. Some evidence for P2 may come from witness statements regarding workshop activities.

For P3, learners need to demonstrate skills associated with the initiation, development and realisation of sculptural work. Assessment evidence for this criteria will be predominantly practical, consisting of initial ideas, worksheets and supporting models and test pieces but should again be supported by written work to indicate which alterations were made, and why, during the sculptural process. There will be little or no evidence of self-determination in selecting materials and processes to be explored.

For P4, learners need to demonstrate their ability to visualise all aspects of a proposed solution in order to promote their idea to a client. Assessment evidence should be gathered from a distinct body of work produced specifically for the purpose of presenting sculpture. Evidence will be primarily practical, with verbal presentations being supported by the practical work. Witness statements or video recordings may also supplement the presented work or presentations.

For M1, learners should be able to apply diverse techniques and work with a variety of tools skilfully demonstrating a clear understanding of the qualities of specific materials in the creation of creative, sculptural work.

For M2, learners need to present a body of work that shows effective interpretation of the given brief. Application of consistent skills throughout should be evident, creating a cohesive body of work. Assessment evidence for M1 and M2 should consist of practical and written work as well as the potential for witness statements and video recordings.

For D1, learners need to demonstrate independence and professionalism in all areas and produce work with a high level of sophistication and creativity in response to given brief(s). They will be able to exploit material qualities and techniques through independent work.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4 M1, M2 D1	Assignment 1: A Sense of Place	Sculptor commissioned to produce commemorative monument for specific place.	Portfolio of evidence consisting of: <ul style="list-style-type: none"> • research • development of ideas such as, experiments with materials, techniques relevant to proposal • final piece including presentation sheets • evaluation such as development and analysis of design ideas and final piece; strengths and weaknesses of design ideas and final piece. Assessment methods might include: <ol style="list-style-type: none"> 1 Using witness statements to: <ul style="list-style-type: none"> • observe and record learner activity and their progress while working • record learners' discussions with groups and ability to communicate at tutorials • observe and record learner presentations. 2 Reports of progress from work experience placements. 3 Learner's own ongoing review of progress and self-evaluation evidenced through statements, notes and annotated sketchbooks/worksheets. 4 Evidence of visual studies from portfolio of ongoing and final work.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Creative Use of Materials, Techniques and Processes	3D Visual Communication	Visual Recording in Art and Design
Introduction to 3D Design Crafts	Working with 3D Design Crafts Briefs	Materials, Techniques and Processes in Art and Design
Introduction to Ceramics	Working with 3D Design Briefs	Exploring Specialist Ceramic Techniques
Working to a 3D Brief		Public Art

National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

CCSkills Sector Skills Council

Design (revisions in draft form June 2009)

- DES1 Apply research on the history and theory of design to your own design activities
- DES2 Apply design industry knowledge to inform your own design work practice and work
- DES5 Follow a design process
- DES6 Work effectively with others in a creative environment
- DES7 Contribute to the production of prototypes, models, mock-ups, samples or test pieces
- DES24 Create 3D Models using a Computer Aided Design System
- DES36 Develop and extend your design skills and practices
- DES38 Manage design realisation
- DES39 Manage a design project.

Essential resources

This unit requires the support of a well-equipped 3D workshop facility. Learners will need access to a variety of hand-held and power tools as well as a variety of sculptural materials, malleable and non-malleable. Access to design areas and drawing studios for recording from primary sources, ideas origination and development will be essential. Both specialist and general learning support materials including books, journals, periodicals, computer access to the internet together with a range of design software are necessary to support learners in their historical, cultural and contemporary contextual research.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- local and regional Business Link – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.

Creative and cultural skills (www.ccskills.org.uk), the sector skills council for arts, crafts and design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

Indicative reading for learners

Textbooks

Andrews O – *Living Materials: A Sculptor's Handbook* (University of California Press, 1988)
ISBN 978-0520064522

Bade P – *Sculptures of Genius* (Sirrocco-Parkstone International, 2008) ISBN 978-1844842155

Bourgeois L – *Louise Bourgeois* (Rizzoli, 2008) ISBN 9780847831319

Chipp H B – *Theories of Modern Art* (University of California Press, 1984) ISBN 978-0520052567

Cross T – *The Shining Sands, Artists in Newlyn and St Ives 1880-1930* (Halsgrove, 2008)
ISBN 978-1841145631

Duby G and Duval J L – *Sculpture, From Antiquity to the Present Day* (Taschen, 2006) ISBN 978-3822850800

Feeke S – *Against Nature* (Henry Moore Institute, 2008) ISBN 978-1905462186

Hicks N – *Sculpture and Drawings* (Flowers East 2004) ISBN 9781873362327

Kallenberg L – *Modelling in Wax for Jewellery and Sculpture* (Krause Publications, 2000) ISBN 978-0873418515

Lanteri E – *Modelling and Sculpting the Human Figure* (Dover, 1986) ISBN 978-0486250069

Malpas W – *Land Art and Land artists* (Crescent Moon Publishing, 2008) ISBN 978-1861712530

Ortega D – *Survival of the idea, failure of the object* (Hatje Cantz, 2007) ISBN 978-3775720755

Plowman J – *Manual of Sculpting Techniques* (A & C Black, 2003) ISBN 9780713665802

Self W – *Nicola Hicks 1998, The Camel That Broke the Straw's Back* (Momentum, 1998)
ISBN 978-1873362943

Smith C N – *The fields of David Smith* (Storm King Arts Centre, 2008) ISBN 978-0960627059

Stern H P – *Earth, Sky and Sculpture* (Storm King Art Center, 2009) ISBN 978-0960627011

Zikos D – *Marks of Identity* (Periscope Publishing, 2008) ISBN 978-1934772874

Journals

Art Monthly

Art Review

Ceramic Review

Contemporary

Crafts Magazine

Creative Review

Design Magazine

Henry Moore Institute Newsletter

New Ceramics

Sculpture

Websites

www.acj.org.uk

the Association for Contemporary Jewellery

www.antonygormley.com

the sculptor's website

www.art-design.umich.edu/mother

links from the School of Art at the University of Michigan

www.artandarchitecture.org.uk

the Courtauld Institute

www.arthistory.net

information on some artists and art movements

www.ilpi.com/artsource/welcome.html

resources on art and architecture

www.jca-online.com

Journal of Contemporary Art – texts of interviews with artists

www.saatchigallery.com/yourgallery

Saatchi Gallery online

www.sheffcol.ac.uk/links/Art_and_Design

Sheffield College art and design links

www.tate.org.uk/modern/default.htm

Tate Modern

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	describing the physical properties and characteristics of different sculptural materials evaluating and presenting a body of work to meet the requirements of a sculpture brief
Creative thinkers	using traditional and non-traditional sculptural techniques appropriately demonstrating sculptural processes through creating and developing own designs evaluating and presenting a body of work to meet the requirements of a sculpture brief
Reflective learners	evaluating and presenting a body of work to meet the requirements of a sculpture brief
Team workers	describing the physical properties and characteristics of different sculptural materials evaluating and presenting a body of work to meet the requirements of a sculpture brief
Self-managers	describing the physical properties and characteristics of different sculptural materials using traditional and non-traditional sculptural techniques appropriately demonstrating sculptural processes through creating and developing own designs evaluating and presenting a body of work to meet the requirements of a sculpture brief
Effective participators	describing the physical properties and characteristics of different sculptural materials evaluating and presenting a body of work to meet the requirements of a sculpture brief.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	<ul style="list-style-type: none"> researching the brief; selecting contexts and sources for recording originating and developing sculptural design ideas reviewing and refining ideas towards completed work planning and preparing presentations of final sculptural designs
Creative thinkers	<ul style="list-style-type: none"> recording from sources and contexts in different creative ways using media, materials and processes imaginatively originating and developing creative sculptural design ideas working on final designs presenting work to different audiences creatively and imaginatively
Reflective learners	<ul style="list-style-type: none"> evaluating the different stages of project development reviewing ideas and listening to feedback at tutorials and crit sessions final evaluation when presenting sculptural design to different audiences
Team workers	<ul style="list-style-type: none"> working with the group to analyse the brief and develop plans for research and ideas for development group evaluations and feedback sessions working on final displays or exhibitions and presentations
Self-managers	<ul style="list-style-type: none"> working independently to further their research studies planning the development of their work to meet the project brief developing ideas and regularly reviewing their progress selecting best ideas and deciding on ways forward planning and preparing presentations
Effective participators	<ul style="list-style-type: none"> participating in group discussions and evaluations working on group projects taking part in presentations.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	scanning and developing sculpture ideas digitally using software programmes to develop sculptural image creation researching contextual and other information for the development of ideas for sculpture brief
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning project briefs and where and how ICT might be used when appropriate evaluating outcomes and the appropriateness of medium
Manage information storage to enable efficient retrieval	researching from internet sources; downloading information; creating folders for storage and retrieval
Follow and understand the need for safety and security practices	undergoing induction period – introduction to the ICT centre and systems and working practices
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching internet sources, selecting from their research, developing own response informed by research
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching information for different briefs and activities; evaluating results of using digital research methods
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records 	designing digitally; using scanners; inputting and formatting information from sources
Bring together information to suit content and purpose	developing design ideas digitally; importing visual and textual information relevant to brief/activity
Present information in ways that are fit for purpose and audience	using digital means to plan, create and give presentations to different audiences
Evaluate the selection and use of ICT tools and facilities used to present information	assessing their progress and commenting on the appropriateness of their selection of ICT tools and facilities – eg use of software programmes
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	using email to submit written work; downloading information from internet sources; storage of information – creating folders for access

Skill	When learners are ...
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	<p>recording visually: scaling, timing, measuring</p> <p>using perspective and other methods of projection</p>
Identify the situation or problem and the mathematical methods needed to tackle it	<p>using measuring and orthographic projection for accuracy, and scaling</p> <p>using software to observe and modify sculptural designs from different viewpoints</p>
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	<p>discussing the project brief</p> <p>describing the physical properties and characteristics of different sculptural materials</p> <p>contributing to group discussions and the sharing of ideas</p> <p>evaluating own and others sculptural designs and finished work</p> <p>presenting to target audiences</p>
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	<p>researching, reading, selecting text and images annotating, commenting and comparing</p> <p>using contextual texts and images to relate to own sculptural ideas</p> <p>evidencing understanding through discussion, crit sessions, evaluations and presentations</p>
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	<p>evaluating results of sculptural designs to meet the brief</p> <p>annotating recordings and ideas for judgement of qualities and appropriateness in the use of selected 3D media, materials and techniques</p> <p>analysing and evaluating selected artists' images for the purpose of developing own work, using personal judgements and relating research to own ideas</p> <p>preparing presentations of final work.</p>