

Unit 115: Knitted Textiles

Code:	M/502/5480
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of the unit is to develop learners' skills and understanding of different techniques and design processes used to create hand or machine-made knitted textiles for fashion or interiors. Learners will explore historical and contemporary knits in order to place their ideas in context.

● Unit introduction

Knit designers, artists and craft workers experiment with a broad range of media and materials in their work. Knitting is used by fashion designers to produce garments and wearable accessories, by interior designers to produce soft furnishings and by textile artists to produce contemporary conceptual art. It is important that textile artists, designers and craft workers have a good knowledge of a wide range of materials and technical skills that can be applied to help them create original work.

The aim of this unit is to encourage learners to experiment with different knit techniques and processes to create hand or machine-made work. Learners will be taught how to make basic stitches and how different yarns can be manipulated by hand or machine. From this basic understanding learners will experiment with yarns, generate ideas for knit on paper and develop samples.

Through learning how to review and refine ideas, techniques and processes, learners will develop a range of knitted textiles, for use within fashion or interiors. Learners will explore the historical origins of knitted fabrics and the wide range of contemporary knitted commercial and individual work in order to place their ideas in context.

On completion of this unit, design ideas will be produced in the form of samples and finished pieces. Learners should be encouraged to be experimental in their work and use traditional and non traditional yarns

Work produced will also support other units in the specialist fashion and clothing and textile pathways.

Learners will need to be made aware of health and safety issues associated with the knitting techniques and equipment that they use. Risk assessments and any appropriate COSHH guidance should be followed at all times especially if dyeing yarns to use.

● Learning outcomes

On completion of this unit a learner should:

- 1 Be able to create ideas for knitted products
- 2 Be able to use knitting techniques to produce samples
- 3 Understand development of own work.

Unit content

1 Be able to create ideas for knitted products

Media and materials: drawing equipment; paper, dyes, coloured and drawing pencils, chalks, oil pastels, inks, paints, acrylics, templates, graph paper

Knitting equipment: eg knitting needles in various sizes, sticks, canes, broom handles, knitting machines

Knitting materials: traditional eg natural and synthetic yarns, natural hand dyed yarns, recycled yarns; non-traditional eg string, rope, raffia, plastic bags, strips of fabric, ribbons, braids, soft wire, straws, dried grasses

Embellishments: eg beads, feathers, buttons, sequins, appliqué

Awareness: historical eg origins of knit, uses of knitted items, the Industrial Revolution and early manufactured knitwear, traditional knitted goods eg Guernsey and Fair Isle clothing; volunteer work for the First World War and Second World War, impact of fashions on styles of knitting; contemporary eg revival of knitting, early 21st century groups, websites, trends

2 Be able to use knitting techniques to produce samples

Knitting techniques and processes: knit preparation eg hand, machine; tensions; various stitches from plain to fancy; casting on; casting off; increasing and decreasing; picking up stitches; edges and finishing techniques; mixing knit techniques, inventing own stitch combinations; colours and textures samples; enhance designs, embellishment

Safety: Health and Safety Act 1974; elimination of risk to self and others; working safely in studio environment; own risk assessments, use of materials, workshop practice; follow COSHH guidance, yarn dyeing

3 Understand development of own work

Suitability of techniques and processes: reflection analysis of chosen materials, colours, stitches, design and overall concept; strengths and weaknesses of design knit process; refine design ideas, changing tension or yarns, materials and style

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 use media and materials to develop ideas for knitted products [IE, CT]	M1 show consistent development of ideas through the purposeful exploration and continuous evaluation of techniques and processes to produce and refine knitted samples	D1 develop independently ideas through the innovative exploration and comprehensive evaluation of techniques and processes to produce samples and to realise the full potential of the work.
P2 research historical and contemporary knits [IE, RL]	M2 produce effective samples using a diverse range of knitting techniques.	
P3 produce knitted samples using knitting techniques safely [CT, SM, TW, EP]		
P4 review samples throughout the stages of development. [RL]		

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 CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This unit has been designed to broaden learners' knowledge, skill and understanding of the techniques and processes usually associated with knit design. Knit designers and craftspeople use many of these techniques in their work. Learners should look at other fashion and textile designer's, work for inspiration and to make links with appropriate materials, techniques and processes.

By exploring the use of knitting techniques and processes, learners will understand how to creatively use ideas delivered to them in their own work. Experiments will be carried out in studios and classrooms, therefore all learners must be aware of the health and safety issues relating to the tools, media and equipment used. Tutors should encourage experimentation with ideas and must explain how to document ideas and findings throughout the project. This could be done in sketchbooks or on worksheets. Finished pieces of work should demonstrate a skilful use of relevant processes. Supporting work must record original ideas and must show a level of understanding of the techniques. This will include learners' reflection on, and evaluations of, their work.

Knitting equipment should be available to enable learners to investigate and explore the materials and techniques. Learners should have access to a wide selection of natural yarns (cotton, wools, silk and linen), synthetic threads (acetate, acrylic, viscose and nylon) and different yarn types (chunky, plied, bouclé, chenilles, brushed). Non-traditional materials will encourage more innovative and independent ideas (soft plastic bags, strips of fabric, ribbons, braids, soft wire, straws, and dried grasses). Learners should experiment with embellishments, such as beads, feathers, buttons and sequins. The use of knitting machines is optional. This unit should be supported by demonstrations to enable learners to develop an understanding of techniques.

Learning outcome 1 should be delivered through practical studio and workshop experiences and must begin with drawing to create ideas. Learners will need paper, pencils, chalks, oil pastels, inks, and paints. Learners should be exposed to a wide range of stitch techniques and knitted items. This can be done through practical demonstration by the tutor, as well as through research of historical and contemporary examples. This will encourage learners to experiment with surfaces, colours and textures. It may also be necessary to work to a brief so learners have a theme to research and can work with aims or objectives in mind. Learners should be guided in the basic preparation process: casting on and off, selecting materials and tension.

Learners should explore the characteristics and properties of the fibres and stitch structures, and document yarn qualities such as opacity, translucency, reflectivity, dullness, weight, texture and hardness. Yarn performance can also be investigated by testing its strength, flammability, elasticity, durability, and pilling. Learners should create knitted test pieces to further their ideas.

Learning outcome 2 should build on the techniques learnt in learning outcome 1 and combine ideas to make creative outcomes. This can be achieved by developing on to more complicated stitches, producing small samples along with written technical notes about patterns and yarns used. Knit books and the internet are an excellent resource for patterns and stitches.

Learners need to document how they are making and decorating the samples with different colours and textures and by using knitting methods. For learning outcome 2, they need to combine and use different techniques within their work. They need to look at different stitches, and experiment with a variety of hand techniques, needle sizes, picking up stitches, twisting, crossing, wrapping, winding, fringing, short row and partial knitting. Adding various materials such as feathers, coins, beads or sequins to embellish the knit design should also be considered.

If using knitting machines, techniques may include, single and double bed stitch structures, stocking stitch, ribs, slip/skip, tucks, single bed jacquard, open fabric, knit, weave and intarsia. A technical file may be useful to record how to thread up the machine, tensions, colours, yarns, and patterns. Stitch cards are also useful if learners are creating a larger pattern piece for a garment.

Samples may be for an intended purpose if this unit is being linked to another for the production of a final outcome. Samples and paper ideas need to be presented on worksheets, in sketchbooks or in a folder or portfolio. All techniques and ideas must be documented to show understanding.

Learning outcome 3 should be delivered by teaching learners how to analyse, refine and review their ideas, subject and influences. They need to be taught how to analyse, modify and adapt their ideas and working practices, before presenting their finished piece of work. This can be done by asking learners to select and present their work to the rest of the group as a group critique or seminar. Any feedback can be recorded and used to help learners make design decisions about their work. By making mistakes and recording why these happened, the learner can learn about refining and improving their work. Written notes and sketches will be useful for this purpose; and should include positive comments and alternative ideas. The final piece of work (and the supporting experiments) can be commented on at relevant stages and an evaluation can be included at the end of the project. This could include constraints that have affected the work, for example time, availability of materials, budget or access to equipment. Some learners may prefer to evaluate their work verbally in the form of a presentation discussing their findings.

This unit is relevant to textile and fashion specialist units and tutors should consider integrating the delivery and assessment of this unit with other units as appropriate.

For example, if the learner is working towards a textile specialism then the tutor could develop a brief that embraces this unit, *Materials, Techniques and Processes and/or Specialist Contextual References*.

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 and activities
Introduction to unit.
Lectures/seminars to introduce historical and contemporary knitted textiles.
Workshop to introduce knit processes – tutor led to include increasing and decreasing tensions.
Visits to galleries, museums, craft galleries for individual research to explore diversity of medium.
Assignment 1: Sample Squares Individual experimentation to produce either a complete fabric book or a small hanging made of individual squares using plain and purl stitches and different materials. <ul style="list-style-type: none">• basic stitches with colour changes, recycled yarns, yarns of different weights, Fair Isle• presentation and evaluation.
Seminars to introduce fancy stitches using slip and transfer, bobbles, cable.
Learner-initiated study.
Assignment 2: A Small Accessory Based on 'Winter' Learners: <ul style="list-style-type: none">• mindmap of 'Winter'• gather visual materials from primary and/or secondary sources• develop ideas in crayons, chalks, paint, collage, printmaking• produce experimental samples• review and refine ideas• develop final piece• present work.
Learner-initiated study.
Assignment 3: 2D/3D Piece Inspired by 'Gardens' Learners: <ul style="list-style-type: none">• brainstorm 'Gardens'• gather visual materials from primary and/or secondary sources and develop a mood board• develop ideas in crayons, chalks, paint, collage, printmaking• produce experimental samples• review and refine ideas• develop final piece• take part in evaluation and group critique.
Review of unit and assessment.

Assessment

For P1, learners need to basic ideas using a range of media and materials. Experimentation may be limited and may be tutor led.

For P2, learners need research historical and contemporary knit and use their findings to inform ideas. Research may be mainly tutor led limited to current magazines, journals and websites. Knit ideas may show little understanding of historical and contemporary work.

For P3, learners need to combine and use knitting techniques and processes creatively to produce knitted samples. Learners need to experiment with different yarns, stitches and tensions safely, recording what they are doing and making notes about techniques and ideas. Learners must show that they are aware of health and safety requirements in this specialist area and safely use their materials and equipment. Learners must write a risk assessment for their working area. The risk assessments must embrace all processes being used, such as yarn dyeing.

For P4, learners need to review the suitability of techniques and processes used during the project. This can be achieved by keeping a notebook about changes that have been made and problems that have occurred. Learners should review and refine work accordingly. Many things affect outcomes, such as time, difficulty of chosen design and equipment, so restraints should be recorded and presented with the project. Any alterations and improvements should also be documented. This can be done by writing a final evaluation at the end of the project or presenting it to the rest of the group as a critique or a seminar.

For M1, learners must show independence and innovation in carrying out purposeful exploration of knit to create effective ideas. This must be better thought through than at pass level, showing higher quality, understanding and skill. Ideas must show clear contextual referencing and draw on and develop ideas from historical and contemporary knit. Learners should use critical and visual analysis throughout the project, demonstrating confident and effective choices. Work should be technically proficient as well as experimental.

For M2, learners must show purpose to produce samples using a diverse range of knitting techniques effectively. Work produced must show a greater sensitivity to the inherent qualities of different yarns and the ways they can be controlled and exploited. Ideas should be refined accordingly, based on the results of samples and test pieces.

To achieve D1, learners should demonstrate a very high level of skill and sophistication. Work must be fluent and well documented. Learners must independently use analysis, evaluations and experimental techniques to create complex work that recognises the potential and limitations of knit design.

Assessment evidence will take a similar format to the pass and merit levels.

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
PI, P2, P3, P4 M1, M2 D1	Assignment 1: Sample Squares	Textile artist develops portfolio and skills by a selection of squares to show a variety of basic stitch techniques and processes. These are presented as tactile books or panels.	Self and tutor assessment. Presentation.
PI, P2, P3, P4 M1, M2 D1	Assignment 2: A Small Accessory Based on 'Winter'	Textile artist creates new work based on 'Winter' theme.	Self, peer and tutor assessment.
PI, P2, P3, P4 M1, M2 D1	Assignment 3: 2D/3D Piece Inspired by 'Gardens'	Textiles artist creates new work based on 'Gardens' theme.	Self and tutor evaluation and group critique.

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 units in the BTEC Art and Design suite:

Level 1	Level 2	Level 3
Introduction to Dyed Textiles	Working to Accessory Briefs	Exploring Specialist Textiles
	Working to Fashion Briefs	Extending Specialist Textiles
	Working to Textile Briefs	

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

Skillfast-UK Sector Skills Council

- O46ND5 Contribute to realising design prototypes for textiles and materials
- O46D10 Developing alternative textile and material design ideas
- CA9 Keep up to date with developments within the arts
- O8NSAS1 Communicate effectively
- CV10 Identify and describe items of cultural interest
- AMTech19 Investigate markets, materials and styles.

Essential resources

Learners should have access to a range of hand knitting equipment including needles and yarns. The resources required will vary depending on whether hand or machine stitch, or both is used. There should be sufficient space and technical support for machines. Hand equipment needed is likely to include a range of knitting needles in various sizes, wools, natural and man made yarns, threads, soft plastic bags, strips of fabric, ribbons, braids, soft wire, straws, dried grasses, beads, feathers, buttons and other embellishments. Learners should have access to a well-resourced learning resource centre where they will find information about knit techniques and historical and contemporary references.

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, has 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.

Skillfast-UK, the Sector Skills Council for Fashion and Textiles (www.skillfast-uk.org), provides details on careers (www.skillfast-uk.org/justthejob) and the industry and has regularly updated news and events pages.

Indicative reading for learners

Textbooks

Barndon B – *Start Knitting: All You Need to Know to Create Your Own Unique Knitwear* (Apple Press, 2007) ISBN 978-1845432034

Bliss D – *How to Knit: The Definitive Knitting Course Complete with Step-by-step Techniques, Stitch Libraries and Projects for Your Home and Family* (Collins & Brown, 2004) ISBN 978-1843402138

Crompton C – *The Knitter's Bible: The Complete Handbook for Creative Knitters* (David and Charles, 2004) ISBN 978-0715317990

Dupernex A – *Beginner's Guide to Knitting* (Search Press, 2004) ISBN 978-1903975831

Epstein N – *Knitting Over the Edge: The Second Essential Collection of Decorative Borders* (Sixth and Spring Books, 2005) ISBN 978-1931543750

Epstein N – *Nicky Epstein's Knitted Flowers* (Sixth and Spring Books, 2006) ISBN 978-1931543880

Stanfield L – *The New Knitting Stitch Library* (Greenwich Editions) ISBN 978-0862884574

Tellier-Loumagne F – *The Art of Knitting: Inspirational Stitches, Textures and Surfaces* (Thames & Hudson, 2005) ISBN 978-0500285572

Vogue – *'Vogue Knitting': The Ultimate Knitting Book* (Sixth and Spring Books, 2003) ISBN 978-1931543163

Walton S – *Teach Yourself Knitting (TY Arts and Crafts)* (Hodder Education, 2006) ISBN 978-0340914489

Journals

Crafts Magazine

Websites

www.craftscouncil.org.uk

Crafts Council

www.knitting-and-crochet-guild.org.uk

The Knitting and Crochet Guild

www.ukhandknitting.com

UK Hand Knitting Association

www.vam.ac.uk/collections/fashion/features/knitting/index.html Victoria and Albert Museum knitting collections

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	exploring media and materials and producing experimental work
Creative thinkers	exploring experimental work and combining techniques and processes to produce outcomes
Reflective learners	researching historical and contemporary knit to inform ideas combining techniques and processes
Team workers	exploring work using studio facilities alongside others
Self-managers	producing final outcomes
Effective participators	working safely as part of a group.

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	visiting galleries and museums to extend understanding and set ideas in context
Creative thinkers	experimenting with knitted materials and processes developing design ideas through to a final outcome
Reflective learners	reviewing samples processes and using experience to improve work considering environmental issues in the design process
Team workers	observing health and safety requirements for the benefit of themselves and the group
Self-managers	independently managing their own research and development of outcomes
Effective participators	participating in group critique and feedback.

● 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	using ICT packages to repeat and size Fair Isle and garment designs
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning for the production of a final outcome
Manage information storage to enable efficient retrieval	aware of obtaining information from secure internet sites
Follow and understand the need for safety and security practices	
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching knit design ideas, methods and processes including web-based material and CD ROM
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	exploring, extracting and assessing the relevance of information from websites and CD ROM
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 	presenting history of knit and contemporary research with illustrations and text
Bring together information to suit content and purpose	
Present information in ways that are fit for purpose and audience	
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	communicating with tutor via email using VLE message boards

Skill	When learners are ...
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	measuring design repeats, working out measured garment or accessory design according to tension estimating yarn usage
Identify the situation or problem and the mathematical methods needed to tackle it	
Select and apply a range of skills to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	
Draw conclusions and provide mathematical justifications	
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	discussing textile work of own and others
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	seeking and reading and responding to research
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	annotating sketchbooks writing up formal evaluation of outcome.