Cambridge Assessment International Education

Scheme of Work

Cambridge International A Level Design & Textiles 9631

for centres in Mauritius

For examination from 2026

Cambridge Pathway

Contents

Introduction

This scheme of work has been designed to support you in your teaching and lesson planning. Making full use of this scheme of work will help you to improve both your teaching and your learner's potential, and to ensure that the syllabus is covered fully. You can choose what approach to take and you know the nature of your institution and the levels of ability of your learners. What follows is just one possible approach you could take and you should always check the syllabus for the content of your course.

Suggestions for independent study **(I)** and formative assessment **(F)** are included. Throughout the scheme of work we have included reference to the Sustainability Development Goals (SDGs 1–17), if and where they are relevant and applicable.

Opportunities for differentiation are indicated as **Extension activities**; there is the potential for differentiation by resource, grouping, expected level of outcome, and degree of support by teacher. Timings for activities and feedback are left to the judgment of the teacher, according to the level of the learners and size of the class.

This scheme of work is not in the same order of syllabus content due to nature of the syllabus. It is split into five topics which cover the syllabus. The sections within each topic can be taught in any order, for example the Dyeing section could be followed by the section on fibres and yarns. You might find it helpful to start the course with a more practical section. The second section in the 'Dyeing and surface decoration' topic is a great place to start as the learners learn about the designer, inspiration and different printing processes. This will inspire and enthuse the learners, although they will be learning theory for paper 3 as well. Then you can teach the first section in Topic 2 which is more theory based and learners will learn about fibres and yarns. There are practical tasks throughout all sections - practical and theory, designed to consolidate learners' knowledge and help their understanding.

Key concepts

This scheme of work is underpinned by the assumption that Design & Textiles is for candidates who want to explore and develop skills, knowledge and understanding of materials, processes and techniques used in the design and production of textile products.

Key concepts are essential ideas that help students develop a deep understanding of their subject and make links between different aspects. Key concepts may open up new ways of thinking about, understanding or interpreting the important things to be learned. The key concepts identified below, carefully introduced and developed, will help to underpin the course you teach. You may identify additional concepts which will also enrich teaching and learning.

The key concepts are highlighted as a separate item in the syllabus. Reference to the Key Concepts is made throughout the scheme of work using the key shown below:

Key Concept 1 (KC1) – Research
Key Concept 2 (KC2) – Design development
Key Concept 3 (KC3) – Creative processes
Key Concept 4 (KC4) – Production construction
Key Concept 5 (KC5) – Textile industry

Guided learning hours

Guided learning hours give an indication of the amount of contact time teachers need to have with learners to deliver a particular course. Our syllabuses are designed around 360 hours for Cambridge International A Level. The number of hours may vary depending on local practice and your learners' previous experience of the subject. The table below give some guidance about how many hours are recommended for each topic.

Content overview	Suggested teaching time (hours / % of the course)	Suggested teaching order
Dyeing and surface decoration	It is recommended that this should take about 65 hours / 18% of the course.	1
Textile materials, performance characteristics and properties	It is recommended that this should take about 30 hours / 10% of the course.	2
Health and safety, processes, patterns and manufacturing	It is recommended that this should take about 70 hours / 20% of the course.	3
Design, fashion and the environmental impact of textiles	It is recommended that this should take about 45 hours / 12% of the course.	4
Coursework	It is recommended that this should take about 150 hours / 40% of the course.	5

Resources

Teaching tools **–** designed to help you to deliver interactive classroom activities and engage learners.

Tool to support remote teaching and learning – find out about and explore the various online tools available for teachers and learners.

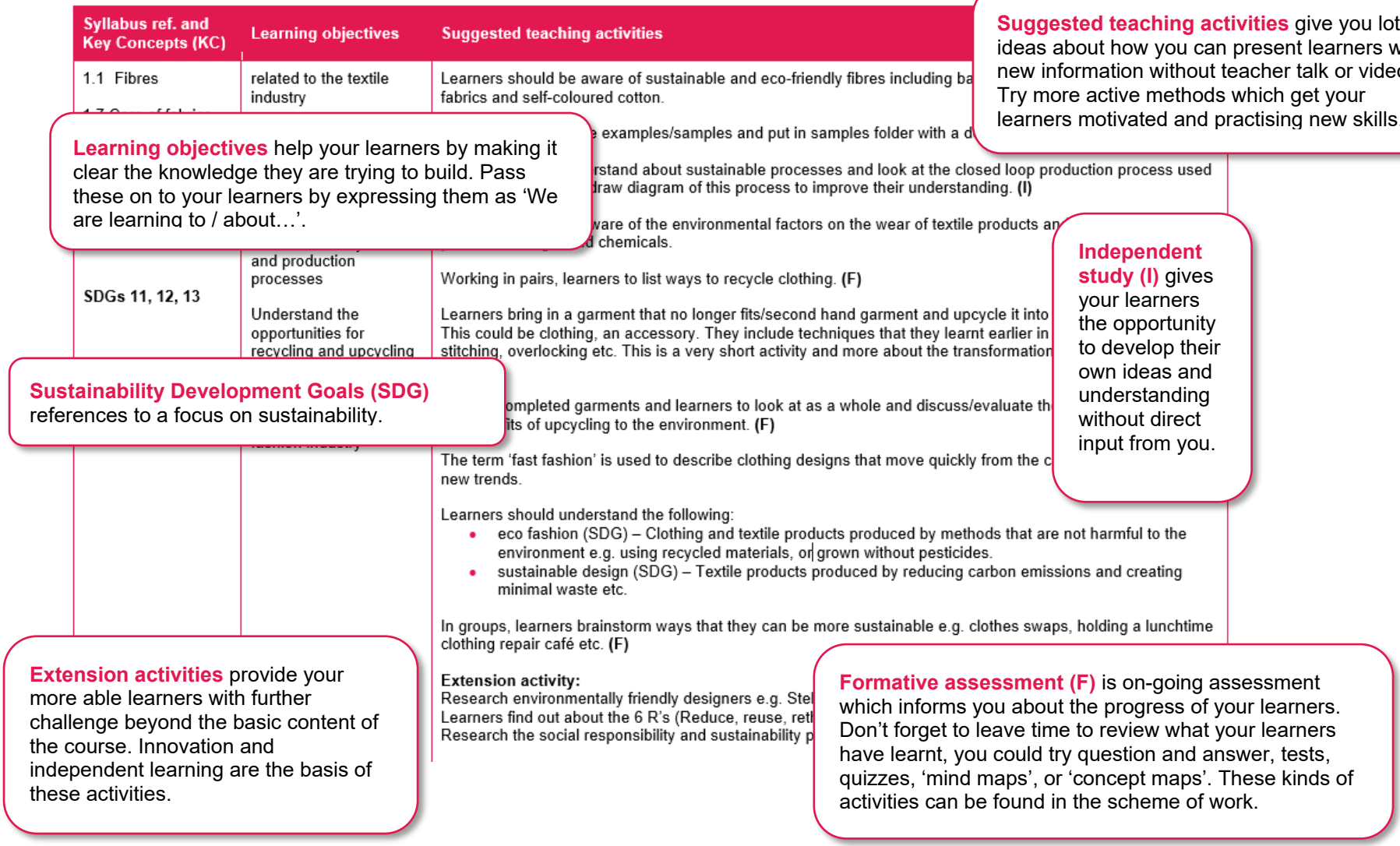
Websites

This scheme of work includes website links providing direct access to internet resources. Cambridge International Education is not responsible for the accuracy or content of information contained in these sites. The inclusion of a link to an external website should not be understood to be an endorsement of that website or the site's owners (or their products/services).

The website pages referenced in this scheme of work were selected when the scheme of work was produced. Other aspects of the sites were not checked and only the particular resources are recommended.

How to get the most out of this scheme of work – integrating syllabus content, skills and teaching strategies

This scheme of work provides some ideas and suggestions of how to cover the content of the syllabus. The following features help guide you through your course.



Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
1.1 Fibres	related to the textile industry	Learners should be aware of sustainable and eco-friendly fibres including ba… fabrics and self-coloured cotton.
		…e examples/samples and put in samples folder with a d…
		…rstand about sustainable processes and look at the closed loop production process used …draw diagram of this process to improve their understanding. **(I)**
		…ware of the environmental factors on the wear of textile products an… …d chemicals.
SDGs 11, 12, 13	and production processes Understand the opportunities for recycling and upcycling	Working in pairs, learners to list ways to recycle clothing. **(F)** Learners bring in a garment that no longer fits/second hand garment and upcycle it into … This could be clothing, an accessory. They include techniques that they learnt earlier in … stitching, overlocking etc. This is a very short activity and more about the transformation…
		…ompleted garments and learners to look at as a whole and discuss/evaluate th… …its of upcycling to the environment. **(F)**
		The term 'fast fashion' is used to describe clothing designs that move quickly from the c… new trends. Learners should understand the following: • eco fashion (SDG) – Clothing and textile products produced by methods that are not harmful to the environment e.g. using recycled materials, or grown without pesticides. • sustainable design (SDG) – Textile products produced by reducing carbon emissions and creating minimal waste etc. In groups, learners brainstorm ways that they can be more sustainable e.g. clothes swaps, holding a lunchtime clothing repair café etc. **(F)** **Extension activity:** Research environmentally friendly designers e.g. Stel… Learners find out about the 6 R's (Reduce, reuse, reth… Research the social responsibility and sustainability p…

Suggested teaching activities give you lots of ideas about how you can present learners with new information without teacher talk or videos. Try more active methods which get your learners motivated and practising new skills.

Learning objectives help your learners by making it clear the knowledge they are trying to build. Pass these on to your learners by expressing them as 'We are learning to / about…'.

Independent study (I) gives your learners the opportunity to develop their own ideas and understanding without direct input from you.

Sustainability Development Goals (SDG) references to a focus on sustainability.

Extension activities provide your more able learners with further challenge beyond the basic content of the course. Innovation and independent learning are the basis of these activities.

Formative assessment (F) is on-going assessment which informs you about the progress of your learners. Don't forget to leave time to review what your learners have learnt, you could try question and answer, tests, quizzes, 'mind maps', or 'concept maps'. These kinds of activities can be found in the scheme of work.

Textile materials, performance characteristics and properties

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
1.1 Fibres 1.2 Performance characteristics of fibres 1.3 Yarns **KC5**	Understand the classification of fibres Understand the origin and production of natural and manufactured fibres Understand the performance characteristics of fibres Understand the difference between staple fibre yarns and filament yarns Understand the benefits of blending fibres and yarns Understand what a speciality yarn is, how they are produced and their uses	Explore prior knowledge and understanding of fibres, this will differ depending on whether they studied the subject at O Level. Starter activity: working in pairs, create a mind map/word cloud of natural and synthetic fibres. **(F)** Learners should understand the classification of fibres. **Natural:** • cellulosic(plant-origin) – cotton, flax, jute • protein (animal-origin) – wool, silk (wild & cultivated) • speciality hair fibres – cashmere, mohair, angora **Manufactured:** • regenerated cellulose fibres – to include viscose, acetate, Tencel® lyocell • new-generation lyocell fibres – modal, lyocell • synthetic polymer fibres – to include polyamide, polyester, acrylic, aramid (Kevlar®, Nomex®), elastomerics, Neoprene Give learners samples of fibres and, in groups, examine them and state to which category they belong. **(F)** Show samples/pictures to show appearance and origin of different fibres. Learners create flowcharts independently, describing the production of: • natural fibres • regenerated and new-generation Lyocell – wet spinning • synthetics – melt spinning **(I)** Learners should understand the following performance characteristics of fibres: • Absorbency • Strength • Elasticity • Flammability • Thermoplasticity

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		In groups, learners look at a variety of textile products and list reasons for the choice of fibre/s used to produce them. **(F)** Demonstrate some performance characteristics by carrying out experiments using fabrics made from specific fibres, e.g. rub test to see how quickly a fabric wears – for durability, flammability tests, etc. Learners should be able to differentiate between fibres using microscopic examination and burning tests. Create a comparison table of different fibres showing their cross section and results of a burning test. **(I)** Learners should understand the basic methods of making staple fibre yarns and filament yarns, single and plied yarns and twist. Learners should understand the advantages of blending fibres and yarns to include cotton/polyester. Speciality yarns, e.g. textured, fancy and their methods of production and uses. Learners should be aware of the many yarn effects that can be created using speciality yarns and how they can be used in fashion and textile fabrics. Learners look at fancy and textured yarns. Divide them into two groups, draw and label each yarn and annotate to highlight core yarn, binder yarn and effect. **(I)** Leaners identify fabrics made with these yarns, e.g. looped yarns create a boucle fabric, etc. Show samples. **Extension activity:** Collect some samples of natural and synthetic fibres and mount in file with a description. Learners to explore end uses for the fibres for fashion and textile products. **(I)** **Practice questions:** • Compare four performance characteristics of one named wool fabric and one named silk fabric. • Evaluate the advantages of blending synthetic fibres with natural fibres. • Assess the production methods of speciality yarns. Give named examples. **(F)** **Resources:** • Textiles and fashion: Materials, processes and products – Rose Sinclair • Technology of textile properties, 3rd Edition – Marjorie Taylor • Needlework for schools – Melita M Neal • Clothing Technology: from fibre to fashion – Roland Kilgus, Werner Ring, Hornberger Marianne • Video of the manufacturing process of polyester yarn – https://youtu.be/fNdsOraykNI?si=vRS8Ja7W1RXDneUA

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
1.4 Fabrics 1.5 Performance characteristics of fabrics 1.6 Fabric finishes 1.7 Care of fabrics **KC5**	Understand and compare the construction of woven, knitted and non-woven fabrics Understand and compare the performance characteristics of woven, knitted and non-woven fabrics Understand how fibres can be blended to construct a range of fabrics Understand how the construction method and fibre content of a fabric affect the performance characteristics Understand the finishes that can be added to fabrics to improve the performance and finish Understand how textile products can be cared for and maintained	Learners should understand the three main fabric construction methods. **Woven fabric construction** Give learners a sample of Hessian fabric and show the warp and weft. Discuss properties of woven fabrics, e.g. strong, stable, have a grain, little stretch, fray when cut etc. Look at fabric samples of different weaves – plain (e.g. calico), twill (e.g. twill) and satin (e.g. satin), dobby, jacquard, cut & loop pile weaves. In pairs, learners analyse/deconstruct samples and draw the three weaves, labelling the warp, weft and selvedge on each one. **(F)** Analyse the visual characteristics and physical properties of each weave, and list end uses. **(I)** Learners should be aware of the variations of weaves and specific fabric names **Knitted fabric construction** Give learners a sample of hand knitted fabric and show the wales and courses. Discuss properties of knitted fabrics, e.g. stretchy, comfort, warm, drape well, etc. Look at fabric samples of different knits – weft (hand and machine, plain, single & double jersey, rib) and warp (tricot, raschel, net and lace structures). In pairs, learners analyse/deconstruct and draw diagrams of warp and weft knits. **(F)** Analyse the visual characteristics and physical properties of each knit, and list end uses. **(I)** In groups, give learners a selection of knitted items and they need to identify the type of knitted construction (warp or weft). **(F)** **Non-woven fabric construction** Give learners samples of non-woven fabrics to understand the process of fabric manufacture – felts (needlefelting and wet felting) and bonded webs. In groups, learners list the properties of non-woven fabrics, e.g. weak, no grain so can be cut in any direction, don’t fray, cheap, etc. and make a list of end products. **(F)**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Learners create a sample of wet felting and needle felting. **(I)** Learners create a sample of bonded web by ironing Angelina fibres together to form a fabric. **(I)** Learners should understand how fibres can be blended to construct a range of fabrics, e.g. polyester/cotton, cotton/viscose, wool/acrylic, etc. Learners should understand how the construction method and fibre content of a fabric affect the performance characteristics. • Strength • Durability • Elasticity • Flammability • Thermal qualities • Absorbency • Fabric care • Drape • Lustre • The performance characteristics to consider when selecting fabrics for specific end uses. **Product analysis** – in groups, give learners a selection of textile products to examine and identify the construction method, type of weave or knit and fabric content. They should then list the performance characteristics needed. **(F)** Learners should understand the value of fabric finishes for specific end use. **Mechanical** – understand how the appearance, drape, handle and texture of fabrics can be modified by: • brushing/raising • calendering • heat setting/permanent pleat • embossing • starching. **Chemical** – the advantages and disadvantages of finishes on fabrics: • mercerisation • water-repellent • flame retardant • anti-static

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		• crease resistant • anti-pilling • shrink resistant • mothproofing • durable press • minimum care. Learners should understand which finishes are used on which fabrics, e.g. easy care on cotton and linen as they crease easily and how finishes can be used to improve the visual characteristics or the working properties of fabrics. Learners given a selection of textile products. Working in pairs, suggest (for each) a suitable finish, justify reasons and outline advantages to the consumer. **(F)** Learners should understand the value and use of the care labelling system – ITCLC and be aware of the care symbols and their meaning. Learners should look at labels in their clothing. **(I)** In pairs, give learners textile products to create a care label for, e.g. silk shirt –hand wash/dry clean; polyester skirt – low iron as thermoplastic; wool jumper – wash on low hear or may cause to felt or shrink. **(F)** Learners should understand the factors that cause physical wear in textiles – snagging, abrasion, pilling, felting, chemicals. **Extension activity:** • Learn to knit. • Produce a sample of weaving. • Create a fabric library of small swatches and mount in file with a description. • Create a table to compare non-woven, woven & knitted fabrics. • List what types of fashion and textile products would benefit from mechanical and chemical fabric finishes and justify the reasons for selecting the finish and the product. • Test a selection of fabrics for physical wear and record results. Mount sample in file. **(I)** **Practice questions:** • Compare the end uses of polyester twill and cotton sateen.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		• Assess suitable finishes that can be used on fabrics for leisurewear to improve the appearance and handle. • Discuss how following the care labelling system helps to maintain good appearance of work clothing. **(F)** **Resources:** • Textiles and fashion: Materials, processes and products – Rose Sinclair • Technology of textile properties, 3rd Edition – Marjorie Taylor • Needlework for schools – Melita M Neal • Clothing Technology: from fibre to fashion – Roland Kilgus, Werner Ring, Hornberger Marianne • YouTube videos – weaving techniques around the world, warp and weft knitting in industry, felt making, non-woven fabrics • Types of fabric manufacturing processes https://youtu.be/cRXzN14NK0s?si=5i70asE717QnWip9 • Video demonstrating how to do wet felt making – https://youtu.be/pkq6rg74qQw?si=YWExOSVVc_prEqrN
1.1 Fibres **KC5** Year 2	Understand what a smart material is and have knowledge of specific applications Understand new developments in fibres and fabrics	Learners should understand how modern and smart textiles work and their uses within the fashion and garment industry. Learners should have an understanding of all new developments. Smart fibres/fabrics **–** textiles that can sense and react to environmental conditions and change in some way. • thermochromic – (reacts to heat), e.g. baby clothing, medical textiles • photochromic – (reacts to light), e.g. t shirts, military clothing • Biomimicry – mimics nature, e.g. Fastskin (mimics sharkskin and helps the swimmer to go faster). Learners identify suitable smart materials for novelty and safety applications. Show examples of textile products. Modern/technical fibres/fabrics: • microencapsulated – nano sized particles added to fibres or fabrics, activated when fabric is rubbed against body which breaks capsules releasing contents, e.g. moisturising tights. • reflective textile – the fabric is woven with millions of tiny glass beads, which reflect light back to their origin. • Phosphorescent – fabrics that glow in the dark. • Nanotechnology – allows new materials to be made by changing individual molecules. Properties of a fabric can be changed, e.g. cotton fibres can be made water and stain repellent.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Medical textiles – textile products used in healthcare applications, e.g. cotton bandages, dressings, disposable products, etc. Biometric textiles **–** electronics imbedded in textiles in the form of digital components. Breathable textiles: GORE-TEX® – (rain and waterproof) GORE-TEX® has three layers: lining, Teflon membrane and outer shell. Gaps are so small they let water vapour out (sweat) but raindrops are too large to get in making the garment waterproof. Used in cycle jackets and outdoor wear. Laminated fabrics: • Kevlar® – Very strong and lightweight, used for bulletproof vests and body armour. • Nomex® – Heat and flame-resistant. Used for firefighters clothing and oven gloves. Microfibres – 100x finer than human hair. Used for sportswear. Learners look at and discuss fabric samples of the above if possible, e.g. microencapsulated tights, Polar fleece, GORE-TEX® jacket, etc. **Extension activity:** Suggest three uses for smart textiles. **(I)** **Practice questions:** • Explain what is meant by the following and give one example of each: (i) Reflective textiles (ii) Breathable fabrics **(I)** **Resources:** • Fabric reference, 4th Edition – Mary Humphries • Smart textiles for designers: Inventing the future of fabric – Rebecca Pailes-Friedman • A great video about the future of smart fabrics: 'Tech you can wear' https://youtu.be/XuNQoMkFOmQ?si=0CJh9izmI5Xp-Isa • Video about 'How it works: GORE-TEX® jackets' https://youtu.be/B7FsbGhRn6M?si=UvoeIdiReUTzpXSG

Dyeing and surface decoration

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
Course outline introduction **KC1**	Understanding the assessment objectives and the different components Understanding the requirements of the assessment criteria	Look at aims and content overview. Look at assessment objectives and key concepts. Explain that Year 1 will cover all of the information required for year 2. Refer to syllabus for more information.
4.1 Application of colour Development of design ideas **KC1** **KC2** **KC3**	To be aware of different influences on the design of textile products Understand the elements and principles of design Understand the role of the designer and the design process Understand different ways to control fullness in garment construction Understand the development of design ideas Understand the importance of design specifications	Learners to understand the design process and the development of ideas. Learners to design a nightwear collection inspired by the natural world. The collection must include a pattern/design which will be used for their printing samples. Discuss the role of the designer and how they get inspiration for their designs from a variety of different sources and influences. Learners to understand the importance of market research and consumer testing. In groups, learners complete a mind map showing different ways of carrying out primary and secondary research. **(F)** Learners to carry out two methods of research to find out more information for their designs, e.g. colours, patterns, etc. • Write a questionnaire • Create a mood board • Interviews with end users or focus groups. **(I)** Learners to understand the importance of designing to specification to include target market, the function, materials, cost, etc. Learners to write design specification based on the results of their research. **(I)** Learners to understand the elements and principles of design to include shape, form, balance, line, proportion, rhythm and colour.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
	Gain knowledge of different printing processes to include roller, block and screen Make samples of techniques used to colour fabric	The elements of design are the building blocks used by designers to create the design. An object or symbol that repeats in the design is a pattern. Learners to understand methods of controlling fullness to include shaping techniques (pleats, darts, tucks, gathers). Show learners examples of these methods on a variety of textile products. Learners include some of these techniques into their design ideas. **(F)** Learners sketch four to six initial ideas based on design specification, annotating key details. **(I)** Learners should be aware of a range of ways of applying colour and pattern to fabrics using printing processes. Show learner's examples of and demonstrate, or show videos of the following printing processes: • Roller • Block • Screen. Learners produce samples of each technique using their pattern designs independently. **(I)** Learners explain how to produce samples (step by step) and evaluate them. **(F)** They may choose to display all of their sample work in a folder which will be added to throughout Year 1. **(I)** Learners work independently and produce a final design to include a printing process and reasons for choice. **(I)** **Extension activity:** Outline the advances in new technology for applying colour and pattern to fabric. **(I)** **Formative assessment:** Sketch and label a design for a bag to include a pattern and suitable printing technique. **(F)** **Practice question:** • Sketch and label a design for a summer dress to show how shape, balance and texture can be used together in garment design. **(F)**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Resources: • Examples of inspiration materials, e.g. moodboards, fashion/home magazines. • From petal to pattern: Design your own floral patterns. Draw on nature. Michelle Parascandolo ISBN: 9780711276321 • Fabric surface design – Cheryl Rezendes ISBN: 978-0500288580 • Video about the basics of block printing – https://youtu.be/g8_GvRoASV0 • Video about engraved roller printing – https://youtu.be/kpDSqgPJ9go • Fashion Artist: Drawing techniques to portfolio presentation (Fashion design series) – Sandra Burke • Figure drawing for fashion design, Vol. 1 – Elisabetta Kudy Drudi and Tiziana Paci
4.1 Application of colour 3.3 Health & safety **KC3** **KC5**	Understand basic colour theory Be aware of the steps that need to be taken to prepare a fabric for dyeing Learn about natural and synthetic dyeing Understand the safe handling and dispersal of dyestuffs and mordants and other assistants to the dye process Understand how to apply colour to fabric to achieve decorative effects with the use of dyes Make samples of techniques used to colour fabric	Learners should understand colour theory – to include primary, secondary, colour mixing. Learners to create colour wheels independently. **(I)** Learners should understand how to prepare fabrics for dyeing (stages at which dye can be applied) – to include de-sizing, scouring and bleaching. Learners should be aware that different fabrics take up dye differently depending on their origin – natural and synthetic. Give learners a selection of natural and synthetic fabric samples which they need to prepare ready for dyeing. **(I)** Learner should understand the importance of safe handling and dispersal of dyestuffs and mordants. **(SDG12)** Learners should be aware of a range of ways of applying colour and pattern to fabrics. Show learner's examples of and demonstrate, or show videos of the following decorative effects achieved with the use of dyes: • resist dyeing (tie dye, Batik, Shibori) • discharge Learners to produce samples of each technique independently, using their colour wheel as inspiration for the colours of dyes, e.g. warm/cold colours. **(I)** Learners to explain how to produce samples (step by step) and evaluate them. **(F)** They may choose to add them to their samples folder. **(I)**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Extension activity: Research one local/traditional method of applying colour to fabric. Write notes on how natural and synthetic fabric take up dyes differently. Learners make their own natural dyes. **(I)** **Practice questions:** • Discuss why it is important to understand colour theory when dyeing fabrics. • Assess the factors that need to be considered in industry when preparing fabrics for dyeing. • Evaluate the range of decorative effects that can be achieved using home-based dyeing methods. **(F)** **Resources:** • www.dylon.co.uk • http://www.wgsn.com/en – a colour trend agency that has a range of predicted colour palettes in image libraries that designers may use for collections. • Traditional Indian Batik – https://fabriclove.com • Fabric surface design – Cheryl Rezendes ISBN: 978-0500288580 • Wild colour: How to make and use natural dyes – Jenny Dean • Local dye manufacturers • Video about traditional Batik – https://youtu.be/1DHGnjj17X4?si=jEw3a_vFGo4cRgHZ
4.2 Surface decoration techniques and embellishment 2.2 Development of design ideas 3.4 Components & fastenings **KC1** **KC2** **KC3**	To be aware of different influences on the design of textile products Understand the elements and principles of design Understand a range of surface decoration techniques Understand and describe a range of hand and machine embroidery stitches	Look at the role of the mood board and show examples (can be from the internet). Learners collect a range of materials (images, photos, textile samples, etc.) to create a mood board inspired by cultural heritage. This will be used as primary research. **(I)** Display completed mood boards and learners will look at it as a whole and discuss/evaluate colours, images, moods created, etc. followed by question & answer session. **(F)** Learners use their mood boards as inspiration for three cushion cover designs, and consider shape, form, balance, line, proportion, rhythm and colour. **(I)** Learners should be aware of the range of techniques available to decorate and embellish the surface of textile products. Show learners examples of and demonstrate, or show videos of the following surface decoration techniques and embellishment: • Fabric manipulation techniques – applique, mola, quilting

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
	Be aware of the range of threads using for sewing Understand how to use a range of components to decorate garments and home furnishings Be aware of different fastenings that are used on textile products	• Embroidery techniques – hand, computerised and free machine embroidery – draw and label specific methods, e.g. chain, blanket, French knot, (hand) and straight, zigzag, overlocking (machine) • Other surface decorative techniques to add texture – beading, shisha and kantha Learners produce samples of the techniques independently – they may combine two examples in one sample. **(I)** Learners explain how to produce samples (step by step) and evaluate them. **(F)** They may choose to add them to their samples folder. **(I)** Learners to be aware of the different types of threads used for different applications/end-uses: • decorative – embroidery, metallic • practical – poly/cotton, buttonhole • embroidery threads. Learners should understand how to match thread to weight and fibre/fabric. Learners should understand how components and trimmings (to include braid, lace, ribbon) can be used to decorate fabrics. Learners should be aware of the range of fastenings that are used in textile products (to include zips, buttons, press studs, Velcro®). Learners look at pictures of different textile products, e.g. denim jeans, chiffon dress, satin skirt, etc. and, in groups, discuss which fastening would be most appropriate and why. **(F)** Learners add samples of fastenings to their samples folder. **(I)** **Extension activity:** Explain the advantages of adding decorative stitching to textile products. Independently learn two new embroidery stitches. Learners add samples of different trimmings to their samples folder. Learners complete a final design for a cushion cover labelling surface decoration techniques, embellishments, components and fastenings used with reasons. **(I)** **Practice questions:**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		• Assess how a range of named decorative components could be used to enhance textile products. • Compare hand embroidery with free machine stitching when adding a design to a fashion top in a creative way. • Assess the range of threads available to the manufacturer when constructing textile products. **(F)** **Resources:** • The embroidery stitch bible – Betty Barnden • Machine embroidery: Stitched patterns – Valerie Campbell-Harding • How to be creative in Textile Art – Julia Triston and Rachel Lombard • Embroidered Textiles: A world guide to traditional patterns – Sheila Paine • Embroidered Textiles: Traditional patterns from five continents – S Paine • Hand embroidery for beginners – https://youtu.be/OWv6Ypzn9dg?si=gJPf28kwaFtYJNwF • Free machine embroidery using a regular sewing machine – https://youtu.be/wAVUShy56RE?si=V7aP98ki7mNn16ja

Health and safety, processes, patterns and manufacturing

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
2.2 Development of design ideas 2.3 Specifications 3.5 The stages of pattern making 3.6 Garment construction 3.2 CAM **KC4** **KC5**	Understand how to use a commercial pattern Understand how to make simple adaptations to commercial patterns Determining quantities of materials Understand what interfacings and linings are To be able to choose the most suitable method of joining fabrics To be able to choose the most suitable edge finish for the top Understand the ways in which CAM is used in the production of textile products Evaluate the quality of the top Evaluate the quality of the tops made	**Prototype summer top** – This activity is designed to give learners the opportunity to learn/consolidate their sewing skills and give them confidence to work independently on coursework projects and the practical task in year 2. Learners will use a range of processes and learn the importance of planning and being able to evaluate their work. Learners should understand the development of samples and prototypes – make sure product meets needs of the client and will be a success. Introduce learners to commercial paper patterns, their uses and the information they give the users. Look at basic pattern markings and seam allowances. Learners use a commercial pattern to make a prototype of a simple summer top. They will need to make up the pattern in a fabric of their choice and will need to write a shopping list of the requirements needed to construct the top, e.g. thread, fastenings, components, fabric amounts, etc. Learners should understand what a fabric specification is. Learners write a fabric specification for their top to include fabric composition (fibre) and construction. **(I)** Learners should understand the importance of estimating textile materials in relation to the design task. Learners should understand the adaptation of commercial patterns, e.g. Adding pockets, changing a neckline, adding fullness. Learners make a simple adaptation to their top pattern, e.g. make longer/shorter. **(F)** Learners should understand the difference between interfacings and linings. Show learners examples of different textile products, e.g. shirt (interfaced cuff and collar), coat (lined), dress (lined), skirt (interfaced yoke/waistband). Discuss different types, weights, colours and their applications. Learners put samples of different types of interfacings and linings into their folder of samples. **(I)** Learners include interfacing or lining to their shopping lists if appropriate or needed for their tops. **(F)**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Learners should be aware of the different methods of joining fabrics in garment construction. Show learner's examples of and demonstrate, or show videos of the following seam types: • Plain • French • Flat fell. Learners to understand the types of fabrics/garments that these seams would be suitable for. Learners produce samples of the techniques independently and explain how to produce them (step by step). **(I)** They may choose to add them to their samples folder. **(I)** Learners evaluate their seam samples and choose the most suitable method to use on chosen fabric for top, taking into account the fabric type and end product. **(F)** Learners should be aware of the different methods of finishing edges in garment construction. Show learners' examples and demonstrate, or show videos of the following edge finishes: • Hems – blind, narrow, double stitched, rolled • Overlocked • Pinked Learners should understand the types of fabrics/garments that these edge finishes would be suitable for. Learners produce samples of the techniques independently and explain how to produce them (step by step). **(I)** They may choose to add them to their samples folder. **(I)** Learners evaluate their edge finish samples and choose the most suitable method to use on chosen fabric for top, taking into account the fabric type and end product. **(F)** Learners carry out full- or small-scale sampling of areas of the top, e.g. seam sampling, components testing, sleeves, collars, facings. **(F)** Learners should understand the stages involved in pattern making – pattern drafting, pattern grading, pattern lay and cutting.

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		Demonstrate how to lay patterns onto fabric using a pattern lay. Learners cut out and construct their tops. **(I)** Learners should be aware of pre-sewing processes that need to be carried out before they start making to include washing, pressing and marking fabrics. Learners carry out any pre-sewing processes to their tops. **(I)** Learners should understand the meaning of CAM (computer aided manufacturing) – the use of software and computer-controlled machinery to automate a manufacturing process. Learners to understand the advantages and disadvantages of using CAM (computer-aided manufacturing) in the production of textile items, to include: • Pattern drafting • Pattern grading • Pattern lay • Fabric cutting • Computerised stitching • Computer-controlled embroidery • Quality control and assurance. Learners work in groups to produce comparison tables of home-based pattern making with CAM listing the advantages and disadvantages. **(F)** Learners should understand the different pressing and steaming methods used in garment construction and why it is so importance to carry out throughout production. Learners evaluate each other's tops, looking at strengths and weaknesses in the making and suggesting improvements. **(F)** **Extension activity:** • Draw a comparison table of different types of interfacing and samples. • Make a more complicated adaptation to their top pattern, e.g. change a neckline, add sleeves, etc. • Learners to sketch improved top design, considering suggestions for improvements. **(I)** **Practice questions:** • Compare home-based pattern making and industrial pattern making.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		• Discuss the factors which a manufacturer would need to consider when choosing the type of edge finish for a garment. **(I)** **Resources:** • Old/used commercial patterns • Needlework for schools – Melita M Neal • Metric pattern cutting for womenswear, 6th Edition – Winifred Aldrick • Dress pattern designing: the basic principles of cut and fit, classic edition – Natalie Bray • Pattern making for fashion design, 5th edition – Helen Armstrong • A basic guide to pattern making – Nick Verreos and David Paul • Carr and Latham's Technolgy of clothing manufacture, 4th Edition – David J Tyler • Textiles at the cutting edge, 2nd Edition – Lesley Cresswell • Clothing Technology: from fibre to fabric, 5th Edition – H Eberle • What is pattern making video – https://youtu.be/BJ9BYNNHAis?si=CQtb03mdRGSBU-l4 • Video 'How to read and understand a dressmaking sewing pattern' https://youtu.be/Hme13MjUz1Y?si=GfLOCv77zrlZs0_j
2.3 Specifications 3.1 Production methods 3.3 Health & safety 3.6 Garment construction **KC4** **KC5**	Understand the 3 main production methods used to make textile products in industry Understanding of functional processes in garment design Understand the ways in which health and safety in a workplace differs from health and safety in a classroom Understand the importance of checking throughout production in order to control quality.	This group activity is designed to give learners the opportunity to plan a (batch) production line. Learners will use a range of processes and learn the importance of planning and being able to work as a team. Learners to understand different functional processes used in garment construction and be able to identify the following style features: sleeves, collars, waistbands, pockets. Product analysis – In groups, learners to look at a variety of clothing items which have different types of sleeves, collars and pockets, as well as a pair of trousers with a waistband. **(F)** The shorts will be a simple shape and include a waistband and pockets. All groups will be given the same fabric pattern pieces – front, back, waistband and pocket, thread and elastic. This activity is about garment construction. Learners to understand the three main production methods – one-off (bespoke), batch and mass/line. Working in groups, learners list examples of end products for each production method. **(F)** Learners should understand what Just-in-time production (JIT) is – a production model in which items are created to meet demand, not created in surplus or in advance of need. Learners should understand what a manufacturing specification is.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
	Understand the importance of following a manufacturing specification throughout production.	Each group to be given a manufacturing specification to use to construct the shorts, which will include: • Main stages of making a flow diagram • Working drawings and product details • Materials to be used • Pattern pieces and lay plan • Construction and stitch details, to include joining, edge finish details • Labelling – for example eco, fair trade, organic, care • Packaging • Deadline • Quantity • Machinery/equipment to be used • Quality control checks Learners should understand the importance of quality control during the production of textile products and systems that are put in place in industry for ensuring that quality standards are maintained. In groups, learners carry out quality control checks throughout the construction, to ensure their shorts meet the specification. **(F)** Learners should have an understanding of safety in the classroom and the workplace. In groups, learners to identify steps taken in the classroom to minimise potential hazards. **(F)** Learner evaluate each other's shorts. They look at strengths and weaknesses in the making. The completed shorts could be measured against a given tolerance to enable learners to understand the need for accuracy in the classroom and industry. **(F)** **Extension activity:** Make notes about tolerance and accuracy in the textile industry. Write a risk assessment for their shorts production line. Write down the steps they would take for safe working practices in their production line. Could visit a modern garment factory to see production at first hand, or show video of garment production. **(I)** **Practice questions:** • Discuss the different manufacturing methods available to produce a summer dress. • Evaluate the importance to the manufacturer of having risk assessments and safety rules for the workforce in a garment factory. **(I)**

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Design, fashion and the environmental impact of textiles

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
2.1 Fashion & Design 2.2 Development of design ideas 2.3 Specifications 3.4 Components and fastenings 3.6 Garment construction **KC1** **KC5**	Understand the influence of trend and changes in lifestyle on fashion, clothing and textile products Understand the impact of fashion on trends. Understand different fashion cycles. Be aware of designing to meet a need Understand the development of design ideas Understand the development of design ideas Understand the use of CAD to create and develop design ideas The development of products that are inclusive	Learners should be aware of fashion history and evolution – to include fashion trends and revivals (eras that have revolutionised fashion, high-end fashion houses, ready-to-wear, trend forecast and influencers). Make a presentation illustrating key fashions from different eras, presented in a timeline order, with key dates, e.g. fifties, hippies, punk, disco, new romantics, etc. In groups, learners produce a mind map of different types of fashion trends and brainstorm what influences fashion. **(F)** There are many influences that shape trends in fashion and textiles, e.g. culture, travel, the environment, the economy, music, film, social media, celebrities, art, world events, technological developments, etc. Learners to be aware of the three types of fashion cycles within the changing trends of fashion – Fad, classic (iconic) and standard trends. In groups, learners investigate each of the trends, write a definition and give examples of fashion and textile products for each. **(F)** Learners to draw a graph/scale illustrating the five stages of the fashion cycle: Introduction, growth, maturity, decline, obsolescence. **(I)** Understanding the fashion cycle will help learners to understand the ways that consumers, designers and manufacturers can reduce the negative impact of garment manufacture on the environment. Learners produce a collection of fashion designs inspired by an era of their choice. **(I)** Learners evaluate each other's designs giving suggestions for improvements. Learners should understand the use of CAD to create and develop design ideas. In groups, learners brainstorm how CAD is used in product design and development, e.g. colourways, creating fabric effects, adapting designs, 3D modelling, virtual catwalk, client presentation, etc. **(F)** Learners to choose one of their fashion designs to use as a final design with suggested improvements. If available, learners to use CAD to show their final design in a variety of colourways. **(I)** Learners to be aware of inclusive designs and connections with different cultures.

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		Inclusive design is when a garment is designed to be useful to everybody, including the disabled community. Learners to understand the benefits of a range of textile outlets – to include designer shops, high-street retailers, franchises, discount stores, markets, electronic developments in retailing (e.g. e-commerce, social media). Learners to work in pairs and list the advantages and disadvantages of each of the different outlets. **(F)** **Extension activity:** Research a fashion designer from a past era, e.g. Mary Quant, Chanel, Dior, Vivienne Westwood. List advantages of CAD, in comparison with manual. Make improvements to their final design to make it more inclusive. **(I)** **Practice questions:** • Describe what is meant by fashion revivals. Give examples of them. • Discuss the impact the three types of fashion cycles have on the design of products. • Assess the advantages and disadvantages for consumers of using e-commerce compared to retail outlets to purchase fashionable clothing. **(I)** **Resources:** • Fashion: The definitive visual history – Caryn Franklin • Fashion Artist: Drawing techniques to portfolio presentation (Fashion design series) – Sandra Burke • Figure drawing for fashion design, Vol. 1 – Elisabetta Kudy Drudi and Tiziana Paci • Video of the five stages of the fashion cycle – https://youtu.be/5sC0cS7j7EI?si=9HvHhls39S2WSOaZ • Video of CAD/CAM in garment manufacturing – https://youtu.be/GXVgVy9X0w8?si=uiTNf7bpFp7scdYO
5 Environmental awareness 1.1 Fibres 1.7 Care of fabrics 2.1 Fashion and design	Understand environmental issues related to the textile industry Understand the effects of environmental factors on the wear of textile products	Learners should have an understanding of the environmental issues related to the textile industry to include air and water pollution, landfill and water consumption. They need to consider the impact of fashion manufacturing and consumption on the environment. Learners should be aware of sustainable and eco-friendly fibres including bamboo, organic fabrics, fair trade fabrics and self-coloured cotton. Learners look at some examples/samples and put in samples folder with a description. **(I)** Learners should understand about sustainable processes and look at the closed loop production process used for Lyocell. Learners draw diagram of this process to improve their understanding. **(I)**

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
KC5 **SDGs 11, 12, 13**	Understand sustainable and eco-friendly fibres and production processes Understand the opportunities for recycling and upcycling textiles Environmental awareness in the fashion industry	Learners should be aware of the environmental factors on the wear of textile products and including soiling, pollution, sunlight and chemicals. Working in pairs, learners to list ways to recycle clothing. **(F)** Learners bring in a garment that no longer fits/second hand garment and upcycle it into a new textile product. This could be clothing, an accessory. They include techniques that they learnt earlier in the course, e.g. printing, stitching, overlocking, etc. This is a very short activity and more about the transformation than the construction. **(I)** Display completed garments and learners to look at as a whole and discuss/evaluate the transformations and the benefits of upcycling to the environment. **(F)** The term 'fast fashion' is used to describe clothing designs that move quickly from the catwalk to stores to meet new trends. Learners should understand the following: • eco fashion (SDG) – Clothing and textile products produced by methods that are not harmful to the environment, e.g. using recycled materials, or grown without pesticides. • sustainable design (SDG) – Textile products produced by reducing carbon emissions and creating minimal waste, etc. In groups, learners brainstorm ways that they can be more sustainable, e.g. clothes swaps, holding a lunchtime clothing repair café, etc. **(F)** **Extension activity:** Research environmentally friendly designers, e.g. Stella McCartney, Patagonia, Veja. Learners find out about the 6 R's (Reduce, reuse, rethink, recycle, repair, refuse) Research the social responsibility and sustainability policies of a high street or online fashion brand. **(I)** **Practice questions:** • Discuss different ways to recycle a wedding dress. • How has online shopping impacted fast fashion? **(I)** **Resources:** • https://www.textileworld.com/textile-world/2020/02/refibra-sustainable-lyocell-production/ • Why sustainability is important. www.earthday.org/campaign/sustainable-fashion/

Syllabus ref. and Key Concepts (KC)	Learning objectives	Suggested teaching activities
		• Environmental problems caused by fast fashion. www.genevaenvironmentnetwork.org/resources/updates/sustainable-fashion/ • Circular fashion: Making the fashion industry sustainable – Peggy Blum • The future of fashion: Understanding sustainability in the fashion industry – Tyler Little • Sustainable fashion: Practical advice and projects for eco-friendly fashion – Sophie Benson • Fashion textiles now – Janet Prescott • Techno Textiles 2: Revolutionary fabrics for fashion and design – Sarah E Braddock Clarke & Marie O'Mahony • YouTube videos – Environmental issues and fast fashion
Coursework	Complete a folder of written and design work in support of practical work.	It is anticipated that almost 50% of the total teaching time will be allocated to coursework. Learners should follow the design process when working on their coursework folder.

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