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Curriculum Plan

KS5 – DT (Fashion & Textiles)

Year 12

Golden Threads	Enrichment	Review and Evaluation

	Topics & Substantive Knowledge	Disciplinary Knowledge	Assessment	Misconceptions	Key Vocabulary	Knowledge Tracking
Term 1	Introduction to the Y12 DT: Fashion and Textiles course structure. Introduction to Y12 NEA contextual challenges set by classroom teacher. This is a practice NEA in preparation for the Y13 NEA. Students to choose one of the 7 contextual challenges and begin to Identify, investigate & outline design possibilities (A01/A) Independent research (Week 1-5) to include primary and secondary investigations. Week - 6 Producing a design brief and specification (A01/B) Week 7 – Students to start A02/C Development of design proposal(s) focusing on initial design ideas. Identifying and investigating design possibilities A wide variety of initial investigations to include primary and secondary resources. Client profiles and interviews. Designer research, Context research, looking at the work of others etc. Producing a design brief and specification (A01/B) A02/C Development of design proposal(s) To demonstrate a wide range of creative initial design ideas to include client feedback and annotation.		Ongoing informal assessment and feedback. Verbal feedback Termly whole group generic written feedback	Understanding what a contextual challenge is. Understanding contextual problems and how to design to solve a contextual problem. The difference between primary and secondary research. Examples of primary research eg visits to exhibitions, galleries, shops etc. Understanding client needs and how to design with a client in mind. Avoiding designing for themselves or personal interest. The value of client feedback and using feedback to develop design ideas.	Identify Investigate design brief Specification Prototype Designer Primary research Secondary research Contextual challenge First concepts Practical experimentation Disassembly Modelling Patterns CAD CAM Communication Project management Evaluation Testing design thinking proposed client/user	

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	Topics & Substantive Knowledge	Disciplinary Knowledge	Assessment	Misconceptions	Key Vocabulary	Knowledge Tracking
Term 1 (cont)	**Theory** Materials and their Applications (1.1) Classification of materials Natural fibres Manufactured fibres Shape Formation Fibre Production Smart materials Technical Textiles Modern materials Methods of investigating and testing materials Physical and mechanical properties, working characteristics, function & aesthetics. Cost. Manufacture & disposal. Plant/cellulose: cotton, linen, ramie Animal/protein: wool, silk Hair Fibres: Cashmere, Mohair, Angora Regenerated fibres: viscose, acetate New generation Lyocells: Modal, Tencel, Lyocell Synthetic Fibres: polyamide (nylon), polyester, acrylic, elastomeric fibres, Awareness of a range of different smart fabrics, e.g. reactive materials, photochromic dyes, phase changing materials. The definition of the term technical textiles. Understanding of a range of technical Textiles eg phosphorescent, microencapsulated fibres and fabrics, Students should be able to explain the shape and formation of fibres. They should understand and be able to discuss the different cross-sectional and linear formation of of fibres eg formation of wool fibres compared to synthetic nylon fibres. Students must understand how workshop tests are set up and what will be tested, measured and compared. Flammability, crease resistance, shrink resistance, colour fastness, strength and pilling.		Weekly exam questions. Termly mini assessments Teacher and self-assessments.		Physical properties mechanical properties working characteristics function Aesthetics Cost Manufacture disposal. Plant/cellulose Protein Regenerated fibres Synthetic Fibres smart fabrics technical textiles. workshop tests Flammability crease resistance shrink resistance colour fastness, strength pilling.	

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Term 2	Week 8-14 – Students to work on A02/C Development of design proposal(s) A02/C Development of design proposal(s) Developed design ideas. Investigative work on surface decoration and garment construction. Fabric choice Modelling and prototyping Final proposal		Ongoing informal assessment and feedback. Verbal feedback. Termly whole group generic written feedback.	That design ideas can be produced in a wide variety of different mediums using different methods. The value of critical analysis and using findings to develop design ideas. Making sure practical investigations are relevant and valid. Having the knowledge to understand how garments are constructed and using this knowledge when designing. Understanding the importance of fabric choice.	Identify Investigate design brief Specification Prototype Designer Primary research Secondary research Contextual challenge First concepts Practical experimentation Disassembly Modelling Patterns CAD CAM Communication Project management Evaluation Testing design thinking proposed client/ user	
	Theory Performance characteristics of materials (1.2) Yarn Production Mixture and Blends Fabric Manufacture Performance Characteristics of Woven Fabrics Performance Characteristics of Knitted Fabrics Performance Characteristics of Non-woven Fabrics Fibre properties Fabric qualities Carding, spinning Understand that fibres need to be made into yarns to manufacture woven and knitted fabrics. The importance of twist in relation to strength and bulk of yarn. Students should be aware of the need to blend fibres to create aesthetic effects, performance fabrics, improved care and maintenance of fabrics. Knowledge of the structure of the main construction methods and the differences between them. Understanding of the qualities given to the fabrics by the construction methods, including typical end-uses.		Weekly exam questions. Termly mini assessments Teacher and self-assessments.		Strength extensibility elasticity fineness electrostatic charge lustre thermal insulation flammability moisture absorption shrinkage Strength durability elasticity flammability thermal qualities Effects creasing absorption stretch formability handle drape weight pattern repeat directional pile nap texture lustre Plain (Tabby) weave fabrics Twill weave fabric Satin weave fabrics Three yarn system weave Brocade and Jacquard fabrics Special Woven	

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Term 3	Week 15-20 Students to work on A02/D Development of design prototype(s) Practical outcome A02/D Development of design prototype(s) Students will spend 6-8 weeks producing a final outcome for their Y12 practice NEA. Practical skills. Given the level of this qualification it is expected that the student will demonstrate their practical skills to a high level using all the potential resources, tools, machines and equipment at their disposal.		Ongoing informal assessment and feedback. Verbal feedback. Termly whole group generic written feedbac	Ensuring they understand a wide variety of different construction techniques to ensure they select the correct methods when making their garments. Ensuring they understand a wide variety of surface decoration to ensure they select the correct methods when making their garments. Knowing what is meant by high quality practical outcomes that meet the requirements of A-Level. Selecting the correct components and using the correct finishing techniques.	Identify Investigate design brief Specification Prototype Designer Primary research Secondary research Contextual challenge First concepts Practical experimentation Disassembly Modelling Patterns CAD CAM Communication Project management Evaluation Testing design thinking proposed client/ user	
	Theory Methods of joining fabrics and use of components (1.3) The use of Fabric Finishes (1.4) Enhancement of Materials (1.5) Seam Threads Fusible Fleece Components: Candidates should have knowledge of a variety of components and their appropriateness for a range of products in relation to the end-user, fabric and design considerations. Fastenings Trims Components and e-components and their appropriateness for a range of products. Interfacing, underlings, linings and interlining. Knowledge of the effects of finishes and the reasons they are needed in relation to the fibre/fabric properties and end use of the product. Detailed knowledge of the chemicals involved and methods of application is not required. Surface Decoration - Dyeing methods Surface Decoration - Printing methods Embroidery, Quilting		Weekly exam questions. Termly mini assessments Teacher and self-assessments.		Seam Threads Fusible Fleece Components Fastenings Trims Components e-components Interfacing, underlings, linings and interlining. Surface Decoration Dyeing methods Surface Decoration - Printing methods Embroidery Quilting	

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	Topics & Substantive Knowledge	Disciplinary Knowledge	Assessment	Misconceptions	Key Vocabulary	Knowledge Tracking
Term 4	Week 21-26 Students to work on A02/D Development of design prototype(s) Students to work on A03/E Analysing and evaluating A02/D Development of design prototype(s) Manufacturing specification. Manufacturing planning/ Working drawing. Diary of production. A03/E Analysing and evaluating final outcomes, client feedback, specification evaluation.			The difference between design specifications and manufacturing specifications. The need for manufacturing plans to create high quality outcomes. Understanding the importance of analysing and evaluating – making constant reference to their client and working towards their needs. Understanding that product development doesn't stop once a prototype has been made and that further improvements should always be available.	Identify Investigate design brief Specification Prototype Designer Primary research Secondary research Contextual challenge First concepts Practical experimentation Disassembly Modelling Patterns CAD CAM Communication Project management Evaluation Testing design thinking proposed client/ user	
	Theory Modern Industrial and Commercial Practice(1.6) Digital Design and Manufacture (1.7) Health and Safety (1.9) Design Communication (1.14) How Technology & Cultural Changes can Impact the Work of Designers (2.3) Social, Moral and Ethical Issues Responsible Design (2.8) Scales of production: One-off (bespoke), Batch production, Mass/Line production. The use of computer systems Sub-assembly Safe working practices Safety in products and services to the consumer Designers and their work Socioeconomic influences Environmental Issues		Weekly exam questions. Termly mini assessments Teacher and self-assessments.		One-off Bespoke Batch Mass production Line production CAD CAM Sub assembly Paul Poiret Chanel Dior Mary Quant Yves St Laurent Pierre Cardin Vivienne Westwood Alexander McQueen Health and Safety at Work Act (1974), COSHH, BSI (British Standards Institute) Safety symbols, Lion Mark.	