



ZIMBABWE

**MINISTRY OF PRIMARY AND SECONDARY
EDUCATION**

**TEXTILE TECHNOLOGY AND DESIGN
COMPRESSED SYLLABUS**

LEVEL 3

Curriculum Development Unit
P O Box MP 133

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Mount Pleasant

Harare

Revised 2011

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FORM 5 & 6 TEXTILES DESIGN AND TECHNOLOGY

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- Zimbabwe School Examinations Council (ZIMSEC)
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2.0 PREAMBLE

1.1 INTRODUCTION

The learning area covers both theoretical and practical aspects of Textile Technology and Design. The syllabus recognizes the use of Textile Technology and Design as a tool for inclusivity that encourages learners to appreciate diversity and differences. It is intended to empower the learner to function in the prevailing economy which is production oriented. The syllabus embraces the skills done in Textile Technology and Design in the quest for creating high level of economic independence in Zimbabwe.

Therefore, practical work is an integral and expected part of the learning area requiring scientific and investigative work. To gain entry, the learner must have obtained at least level 2 pass in Textiles Technology and Design and two of the following: all business subjects and all science subjects.

Industrial attachment is highly recommended throughout the learning period. Teachers are therefore advised to ensure that learners undertake experimental work in an appropriate and safe environment. The learning area intends to develop learners of various social settings in the use of locally available resources in order to develop patriotism.

1.2 RATIONALE

The textile technology and design brings out the important roles that learning area plays in society such as self-sufficiency, enterprising and patriotism in preserving norms and values (Unhu/Ubuntu/Vumunhu). This creates life-long skills which include creative thinking and problem solving. The learning area intends to achieve balanced knowledge, understanding and skills acquisition which enable learners to become independent in aspects of life such as self-employment, employment and further education.

1.3 SUMMARY OF CONTENT

Textile Technology and Design will cover theory and practical activities in the following areas:

- Textile technology
- Textile design
- Garment design and construction
- Business and Enterprising studies

The two year learning phase seeks to develop the following skills among others:

- technical
- technological
- self-management
- communication
- problem solving
- critical thinking
- evaluation and analysis
- leadership
- management
- learning and innovation
- enterprise
- creativity
- interpersonal
- decision making

FORM 5 & 6 TEXTILES DESIGN AND TECHNOLOGY

METHODOLOGY AND TIME ALLOCATION

6.1 METHODOLOGY

The stipulated objectives will be achieved by using the following methods:

- Field trips
- Experimental work
- Research
- Practical assignments/Projects
- Demonstrations
- Group discussions and presentations
- Debate
- Short lectures
- Attachments: (students can be attached to textiles and clothing industries, colleges and research centres) during the holidays or weekends at least four weeks for the two year learning period.

NB Teachers are encouraged to apply orthodidactic principles where possible. These include;

- visual tactile,
- simulation,
- concreteness

6.2 TIME ALLOCATION

To achieve the stated objectives for this syllabus, it is recommended to allocate **two hours** per week while taking cognizance that learners should create more for their own studies

6.3 ASSUMPTIONS

It is assumed that learners have :

- a basic knowledge of textile fibres
- the basic knowledge of designing and garment construction
- knowledge about the use of some basic sewing equipmentsuch as sewing machine, irons and scissors

- basic enterprise skills
- knowledge in wardrobe planning for different occasions

6.4 CROSS- CUTTING THEMES

- Gender equity
- Sexuality, HIV and AIDS
- Heritage studies.
- Financial literacy
- Disaster risk management
- Human rights
- Children's rights
- Environmental issues
- Guidance and counseling
- Collaboration
- ICT

6.5 PRESENTATION OF THE SYLLABUS

The level 3 Textiles Design Technology syllabus is one document which consists of the preamble, rationale, summary of content, assumptions, cross-cutting themes, aims, objectives, topics, methodology, time allocation, scope and sequence and content matrix. Assessment is in theory and practical activities.

4.0 AIMS

The syllabus aims are to:

- 3.1 Encourage learners to have an investigative approach to the study of Textile Technology and Design which includes problem solving, scientific, technical and creative skills
- 3.2 Expose learners to the historical, cultural, functional, economical, managerial, enterprising and aesthetic aspects of Textile Technology and Design
- 3.3 Develop awareness of how textiles and users interrelate in a changing multicultural and technological society
- 3.4 Foster in learners the ability to make informed decisions and communicate ideas through appropriate terminology and media
- 3.5 Nurture an informed awareness and appreciation of design and textiles as an applied field of study leading to further and higher education and a range of career options

5.0 OBJECTIVES

By the end of the 2 year learning period, learners should be able to:

- 4.1 Explore creative use of materials, techniques and technologies in Textile Technology and Design.
- 4.2 Formulate solutions with applications of components in textile Technology and Design, Garment Construction and Business Studies
- 4.3 Generate historical, cultural, functional, economical, managerial, enterprising and aesthetic ideas in Textile Design
- 4.4 Analyse and apply relevant knowledge by organizing and presenting information clearly and logically
- 4.5 Acquire competences in using textile technology
- 4.6 Evaluate acquired knowledge and understanding, useful in decision making
- 4.7 Identify cultural artefacts and designs and use them to create textile product designs
- 4.8 Design styles, draft and make patterns for different functions and figure types
- 4.9 Apply quality assurance skills in textiles production processes

5.0 TOPICS TO BE COVERED

5.4 TEXTILE TECHNOLOGY

5.4.1 Fibres

- Textile science

5.4.2 Yarns

- Yarn production
- Yarn properties
- Yarn count

5.2 TEXTILE DESIGN

5.2.1 Fabric construction

- Weaving - plain, basket and twill
- Knitting – warp and weft
- Non-woven methods such as : felting, bonding and narrow fabrics
- Blended fabrics and mixtures
- Fabric properties

5.2.2 Fabric Finishes

- functional
- special

5.2.3 Colour application

- Dyeing
- Printing

5.2.4 Care of fabrics

- Care labelling
- Colour fastness

5.2.5 Textile enhancement processes

5.3 GARMENT DESIGN AND CONSTRUCTION

5.3.1 Garment Design

- Elements and principles of designing
- Designing equipment
- Design illustration
- Design process
- Pattern making
- Pattern alteration
- Computer Aided Design
- Design Costing

5.3.2 Garment Construction

- Manufacturing processes
- Use of specialized equipment in cutting and garment production
- Computer Aided Manufacturing

5.1 BUSINESS AND ENTERPRISING STUDIES

- Types of business such as: sole trader, partnership, cooperative

5.1.1 Business Finance

- Sources of capital
- Book keeping

5.1.2 Management

- Functions of management: planning, leading, controlling and organizing

5.1.3 Business Planning

- Business proposal

5.1.4 Marketing

- Marketing research
- Product development
- Advertising

5.1.5 Production

- Production systems

FORM 5 & 6 TEXTILES DESIGN AND TECHNOLOGY

7.0 SCOPE AND SEQUENCE

TOPIC	LEVEL 3
TEXTILE TECHNOLOGY	
Textile Science	<ul style="list-style-type: none"> • Molecular structure and formulae • Polymerisation and their types • Forces of attraction <ul style="list-style-type: none"> -intramolecular -inter-molecular • Fibres <ul style="list-style-type: none"> -requirements of fibre forming polymers -polymer system - microscopic, biological, thermal, physical and chemical properties -fibre processing -fibre swatches
Yarns	<ul style="list-style-type: none"> • Spinning system methods • Types of yarns • Properties and uses of yarns • Yarn count
TEXTILE DESIGN	
Fabric construction Weaving Knitting Other methods of fabric construction	<ul style="list-style-type: none"> • weaving process • complex weaves • structure of weaves • structure of knitted fabrics • properties of knitted fabrics • methods of fabric construction <ul style="list-style-type: none"> -narrow fabrics -non-woven fabrics
Fabric finishes	<ul style="list-style-type: none"> • Mechanical /physical • Chemical

TOPIC	LEVEL 3
Colour application	<ul style="list-style-type: none"> • Dyeing and Printing techniques
Textile enhancement process	<ul style="list-style-type: none"> • Decorative processes such as : <ul style="list-style-type: none"> -embroidery -patchwork -beadwork
GARMENT DESIGN AND CONSTRUCTION	
Garment Design Design elements	<ul style="list-style-type: none"> • Elements of design • Principles of design • Design equipment • Design Illustrations • Design process • Design costing
Pattern making	<ul style="list-style-type: none"> • Sizing system • Basic blocks • Block styling
Computer Aided Design (CAD)	<ul style="list-style-type: none"> • CAD and software
Production	<ul style="list-style-type: none"> • Production systems • Production functions model • Quality control
Equipment	<ul style="list-style-type: none"> • Specialized equipment in garment construction
Computer Aided Manufacturing(CAM)	<ul style="list-style-type: none"> • Computer Aided Manufacturing and software

TOPIC	LEVEL 3
Garment costing	<ul style="list-style-type: none"> • Costing components
BUSINESS AND ENTERPRISING	
Types of business enterprising and business finance	<ul style="list-style-type: none"> • Factors affecting textile business environment • Types of business units • Characteristics of business units • Objectives for starting a business • Business finance
Management	<ul style="list-style-type: none"> • Functions of management
Marketing	<ul style="list-style-type: none"> • Marketing research • Product development • Marketing mix

FORM 5 & 6 TEXTILES DESIGN AND TECHNOLOGY

8.0 COMPETENCY MATRIX

FORM5

TEXTILE TECHNOLOGY

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Textile science	<ul style="list-style-type: none"> • Identify organic elements in a periodic table and their formulae • Analyse chemical elements and compounds • Explain polymerization • Discuss the formation of polymers • Distinguish between inter and intra molecular forces 	<ul style="list-style-type: none"> • Organic elements in the periodic table • Molecular formulae and structure: <ul style="list-style-type: none"> -chemical elements -chemical compounds • Polymerization and its types • Formation of polymers and their types • Forces of attraction <ul style="list-style-type: none"> -intra molecular -inter molecular 	<ul style="list-style-type: none"> • Explaining organic elements in a periodic table and their formulae • Drawing atomic structures of elements and compounds • Describing the process of polymerization • Listing types of polymers • Illustrating the formation of polymers • Discussing inter and intra molecular forces • Drawing the chemical structure of inter and intra forces 	<ul style="list-style-type: none"> • Multi-media • Resource person

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Fibres	<ul style="list-style-type: none"> • Explain the requirements of fibre forming polymer and polymer system of natural and man-made fibres • Analyse microscopic, physical, chemical, biological and thermal properties of natural and man-made fibres 	<ul style="list-style-type: none"> • Requirements of fibre forming polymers • Polymer system of natural and man made fibres • Microscopic, physical, chemical, biological and thermal properties of natural and man-made fibres 	<ul style="list-style-type: none"> • Explaining the requirements of fibre forming polymers • Discussing the amorphous and crystalline regions • Stating the dominating forces of attraction • Illustrating chemical structure of the polymer system • Observing microscopic, physical, chemical, biological and thermal properties of natural and man-made fibres • Describing microscopic, physical, chemical, biological and thermal properties of natural and man-made fibres. 	<ul style="list-style-type: none"> • Multimedia • Textbooks • Realia • Microscope •

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Fibre production	<ul style="list-style-type: none"> • Describe the production processes of natural and man-made fibres • Distinguish between natural and man made fibre swatches • Explain the spinning methods used for natural and man-made fibres 	<ul style="list-style-type: none"> • Classification of fibres according to their sources • Production of natural and man-made fibres • Natural and man-made fibres • Spinning methods 	<ul style="list-style-type: none"> • Explaining fibres according to their sources • Discussing the production processes of natural and man made fibres • Collecting fibre swatches from different sources • Describing the spinning process of natural and man-made fibres • Visiting ginneries and spinning factories 	<ul style="list-style-type: none"> • Realia • Multimedia • Textbooks • Resource person
Yarns	<ul style="list-style-type: none"> • Identify spinning system methods used to produce different yarns • Analyse properties of different types of yarns and uses of yarns • Explain the numbering system of yarns 	<ul style="list-style-type: none"> • Spinning system methods • Types of yarns • Properties and uses of yarns • Yarn count 	<ul style="list-style-type: none"> • Describing the spinning system methods • Illustrating different types of yarns • Discussing properties and uses of yarns • Calculating yarn count 	<ul style="list-style-type: none"> • Multi media • Print media • Field trip

TEXTILE DESIGN

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
FABRIC CONSTRUCTION Weaving and knitting	<ul style="list-style-type: none"> • Describe weaving and knitting process • Illustrate structures of different weaves and knitted • Make samples of different weaves knitted fabrics • Identify properties of knitted fabrics 	<ul style="list-style-type: none"> • Weaving process • Complex weaves: -dobby -jacquard -honeycomb -pique -pile • Structures of weaves and knitted fabrics • Properties of knitted fabrics 	<ul style="list-style-type: none"> • Discussing weaving and knitting process • Sketching structures of different weaves and knitted fabrics • Constructing samples of different weaves • Visiting spinning companies 	<ul style="list-style-type: none"> • Textbooks • Samples • Expert guest
Other methods of constructing	<ul style="list-style-type: none"> • Outline different types of narrow fabrics • Describe non-woven fabrics 	<ul style="list-style-type: none"> • Methods of fabric construction -narrow fabrics -non woven fabrics 	<ul style="list-style-type: none"> • Identifying different narrow fabrics • Discussing non woven fabrics 	<ul style="list-style-type: none"> • Samples of narrow fabrics • Textbooks • Multimedia
Fabric finishes	<ul style="list-style-type: none"> • Examine mechanical/physical and chemical finishes • Demonstrate finishing techniques 	<ul style="list-style-type: none"> • Mechanical/physical • Chemical 	<ul style="list-style-type: none"> • Discussing the major groups of fabric finishes • Applying finishing techniques 	<ul style="list-style-type: none"> • Multi-media • Realia • Textbooks
Colour application	<ul style="list-style-type: none"> • Demonstrate different types of dyeing and printing techniques 	<ul style="list-style-type: none"> • Dyeing and printing techniques 	<ul style="list-style-type: none"> • Applying dyeing and printing techniques 	<ul style="list-style-type: none"> • Dyes, printing paste and equipment

				<ul style="list-style-type: none"> • Fabric
Textile enhancement processes	<ul style="list-style-type: none"> • Identify different decorative processes • Analyse the characteristics of different decorative processes 	<ul style="list-style-type: none"> • Decorative processes such as: <ul style="list-style-type: none"> -embroidery -patchwork -bead work 	<ul style="list-style-type: none"> • Discussing the different decorative processes • Constructing some of the different decorative processes on samples and actual garments 	<ul style="list-style-type: none"> • Textbooks • Samples of decorative processes • Multimedia

GARMENT DESIGN AND CONSTRUCTION

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Design elements and principles	<ul style="list-style-type: none"> • Analyse principles and elements of design • Illustrate elements of design • Demonstrate principles of design 	<ul style="list-style-type: none"> • Elements of design: <ul style="list-style-type: none"> -line -form -shape -colour • -texture Principles of design: <ul style="list-style-type: none"> -rhythm -balance -emphasis -harmony -proportion -scale 	<ul style="list-style-type: none"> • Discussing design elements • Demonstrating how design elements are used • Discussing principles of design • Illustrating the principles of design 	<ul style="list-style-type: none"> • Textbooks • Design pictures • ICT tools • Clothing catalogues • Sample
Design equipment	<ul style="list-style-type: none"> • Describe designing equipment • Draw using design equipment 	<ul style="list-style-type: none"> • Design equipment: <ul style="list-style-type: none"> -silhouettes 	<ul style="list-style-type: none"> • Discussing design equipment 	<ul style="list-style-type: none"> • Real design equipment • Pictures

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
		<ul style="list-style-type: none"> -motion drawings -pose -mood -style -use of colour and media 	<ul style="list-style-type: none"> • Sketching designs using design equipment 	<ul style="list-style-type: none"> • Textbooks
Designing illustrations	<ul style="list-style-type: none"> • Recognize figure demarcations • Indicate style features on the silhouette • Paint illustration • Draw flat diagram 	<ul style="list-style-type: none"> • Figure anthropometry • Figure dressing (style features) • Illustration painting (colouring) • Flat diagram illustration • Labelling of style features 	<ul style="list-style-type: none"> • Distinguishing figure demarcations • Illustrating styles on silhouettes • Demonstrating painting of the illustration • Constructing flat diagrams • Labelling the style features 	<ul style="list-style-type: none"> • Designing equipment • Textbooks • Colouring equipment
Designing process	<ul style="list-style-type: none"> • Identify design opportunity • Compose a design proposal • Make a prototype • Analyse the prototype 	<ul style="list-style-type: none"> • Design opportunity • Design proposal • Prototype • Testing and evaluation 	<ul style="list-style-type: none"> • Investigating design opportunity • Developing a design proposal • Constructing a prototype • Evaluating the prototype 	<ul style="list-style-type: none"> • Designing equipment • Textbooks
Design costing	<ul style="list-style-type: none"> • Identify unique features in a design • Relate design to current fashion trends • Calculate the cost in relation to time spent in designing 	<ul style="list-style-type: none"> • Uniqueness/creativity • Alignment to fashion trends • Time spent to design 	<ul style="list-style-type: none"> • Recognizing creativity in the design • Rating designs according to current fashion trends 	<ul style="list-style-type: none"> • Textbooks • Pictures • Resource person

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
			<ul style="list-style-type: none"> Expressing time spent on design costing 	
Computer Aided Design (CAD) and Pattern making	<ul style="list-style-type: none"> Design patterns using CAD software Examine the CAD system in Textile Technology and Design Relate to size charts and individual body measurements Generate basic blocks Formulate various styles from given basic blocks 	<ul style="list-style-type: none"> Software used in CAD Advantages and disadvantages of CAD in Textile Technology and Design Sizing systems Basic blocks: <ul style="list-style-type: none"> -skirt -bodice -dress -trousers Block styling 	<ul style="list-style-type: none"> Drafting patterns using CAD Analyzing the CAD system in Textile Technology and Design Visiting companies which use the CAD system in pattern making constructing basic blocks using size charts and individual body measurements. 	<ul style="list-style-type: none"> CAD softwares Computers Resource person Textbooks Fashion catalogues Pattern making equipment
Computer Aided Manufacturing (CAM) and productions	<ul style="list-style-type: none"> Differentiate the production systems in Textile Technology and Design Explain the production functions model Critique the impact of change and innovation upon production systems Examine the importance of quality control at each stage of production in the Textile Technology and Design Identify the software used in CAM 	<ul style="list-style-type: none"> Production systems <ul style="list-style-type: none"> a)continuous/mass production b)batch c)single item Production functions model Impact of change and innovation upon production systems Quality control Software used in 	<ul style="list-style-type: none"> Identifying the production systems in Textile Technology and Design Discussing the production systems in Textile Technology and Design Examining the production functions model Analyzing the 	<ul style="list-style-type: none"> Software for CAM Machines Textbooks

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
	<ul style="list-style-type: none"> Analyse the use of CAM software in manufacturing 	CAM <ul style="list-style-type: none"> Advantages and disadvantages of CAM 	impact of change and innovation upon production systems <ul style="list-style-type: none"> Explaining quality control in Textile Technology and Design Justifying the use of CAM in garment manufacturing Criticising the use of CAM in manufacturing Visiting companies which use CAM in manufacturing 	
				<ul style="list-style-type: none">
Garment costing	<ul style="list-style-type: none"> Justify the cost of garments Evaluate how the components contribute to the garment cost Determine the selling price of the garment 	<ul style="list-style-type: none"> Material cost Production cost Overheads Profit Selling price 	<ul style="list-style-type: none"> Breaking down the components which contribute to garment costs Calculating the cost of material, production and overheads 	<ul style="list-style-type: none"> Textbooks Real garments
Equipment	<ul style="list-style-type: none"> Operate the equipment for cutting, garment production and pressing 	<ul style="list-style-type: none"> Cutting -cutting blades Garment 	<ul style="list-style-type: none"> Demonstrating the use of cutting, garment 	<ul style="list-style-type: none"> Equipment Textbooks Resource

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
	<ul style="list-style-type: none"> Illustrate the equipment for cutting, garment production and pressing 	production -overlocker -bartaking -embroidery machine -flossing machine -elasticating machine -hemming machine <ul style="list-style-type: none"> Pressing -steam presser -vacuum presser 	production and pressing equipment <ul style="list-style-type: none"> Analyzing the importance of specialized textile equipment in garment construction 	person

BUSINESS AND ENTERPRISING

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
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TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Types of business enterprising and business finance	<ul style="list-style-type: none"> Identify various factors that affect textile business environment Explain different types of business units Distinguish the characteristics of business units Examine the objectives of starting a business Evaluate the importance of business proposal, sourcing funds and book keeping 	<ul style="list-style-type: none"> Factors affecting textile business environment Types of business units: <ul style="list-style-type: none"> -sole trader -partnership -cooperative Characteristics of business units Objectives for starting a business Business finance: <ul style="list-style-type: none"> -business proposal -sourcing funds -book keeping 	<ul style="list-style-type: none"> Discussing various factors that affect textile business environment Comparing different types of business units Examining the characteristics of business units Discussing the objectives for starting a business Drawing up a business proposal Sourcing funds and book keeping Visiting Small to Medium Enterprises 	<ul style="list-style-type: none"> Textbooks Resource person Multi-media

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Management	<ul style="list-style-type: none"> Explain the four functions of management 	<ul style="list-style-type: none"> Functions of management: <ul style="list-style-type: none"> -planning -controlling -leading -organising 	<ul style="list-style-type: none"> Discussing the four functions of management Practising the four functions of management 	<ul style="list-style-type: none"> Textbooks Resource person Multi-media Case studies
Marketing	<ul style="list-style-type: none"> Explain the 	<ul style="list-style-type: none"> Components of market 	<ul style="list-style-type: none"> Outlining the 	<ul style="list-style-type: none"> Textbooks

TOPIC	OUTCOMES Learners should be able to:	UNIT CONTENT	SUGGESTED LEARNING ACTIVITIES AND NOTES	SUGGESTED RESOURCES
	components of market research <ul style="list-style-type: none"> • Carry out market research in the Textile Technology and Design • Analyse the stages of product development in the Textile Technology and Design • Describe the components of the market mix 	research <ul style="list-style-type: none"> • Product development • Market mix 	components of market research <ul style="list-style-type: none"> • Discussing the components of market research • Demonstrating the stages of product development in the Textile technology and Design • Discussing the components of the market mix in the Textile Technology and Design 	<ul style="list-style-type: none"> • Resource person • Multimedia • Expert presentation

FORM 5 & 6 TEXTILES DESIGN

9.0 ASSESSMENT

The syllabus will be assessed in three components which are practical, theory and continuous assessment.

9.1 Assessment Objectives

By the end of the learning period, learners should be able to:

- 9.1.1 Analyse the relationship between textile properties and human needs.
- 9.1.2 Demonstrate scientific knowledge of the composition, structure and processing of textile fibres, yarns and fabrics.
- 9.1.3 Apply investigative skills in evaluating production processes and the inherent nature of textiles.
- 9.1.4 Demonstrate the ability to use technology in Textile Designing and Manufacturing
- 9.1.5 Study market needs and produce designs which suit the gaps in the market with a high degree of creativity and aesthetic value
- 9.1.6 Demonstrate calculating skills in textile technology, garment construction and business
- 9.1.7 Draft patterns according to specified designs and select the production system, ensuring quality in all the processes
- 9.1.8 Select different skills in business such as leadership, bookkeeping and quality control to address the dynamic environment
- 9.1.9 Carry out a market research
- 9.1.10 Demonstrate different ways of fabric construction
- 9.1.11 Analyse the impact and effect of mechanical and chemical finishes on fabrics
- 9.1.12 Apply dyeing and printing techniques on fabrics
- 9.1.13 Work construction and decorative processes on textile products

9.2.1 SCHEME OF ASSESSMENT

PAPER	TYPE OF PAPER	DURATION	MARKS	WEIGHTING
1	Theory	3hrs	100	30%
2	Practical examination	Day 1 – 7 ½ hrs Day 2 - 7½ hrs	100	40%

3	Continuous assessment	6 terms	100	30%
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9.2.2 PAPER DESCRIPTION

Paper 1: Theory

The paper is in two sections A and B. Section A is compulsory. This section will be awarded 40 marks. Section B consists of five questions. Candidates are required to answer **three** questions from section B. This section will be awarded 60 marks (20 marks for each question).

Paper 2: Practical Examination

The paper consists of 1 question which candidates will answer. The paper will be awarded 100 marks of which 40 will be for pattern making whilst 60 are for construction. Advance information should be issued to centres 3 weeks before the examination. The candidate will draft the required pattern, lay, cut out and construct the article in two consecutive days. Candidates should be given 30 minutes break per examination session.

Paper 3: Continuous assessment

Continuous assessment for Level 3 will consist of practical tasks, written tests and end of term examinations. The component will be awarded 100 marks

i) Practical Tasks

These are activities that teachers use in their day to day teaching. These may include subject related projects and individual practical assignments.

ii) Written Tests

These are tests set by the teacher to assess the concepts covered during a given period of up to a month. The tests should consist of structured and essay questions.

Summary of Continuous Assessment Tasks

In 5 terms, candidates are expected to have done at least the following recorded tasks per term:

- 1 practical test
- 2 written tests

- 1 Project

LEVEL	ASSESSMENT TASKS	FREQUENCY	WEIGHT %
5	Practical	1 per term	5%
	Theory tests	2 per term	5%
	Project	2 per year	5%
6	Practical	1 per term	5%
	Theory tests	2 per term	5%
	Project	2 per year	5%
TOTAL			30%

SPECIFICATION GRID

Specification Grid for Continuous Assessment

Component Skills	Practical Tasks	Written Tests
Skill 1 Knowledge&Comprehension	20%	20%
Skill 2 Application&Analysis	50%	50%
Skill 3 Synthesis&Evaluation	30%	30%
Total	100%	100%
Weighting	21%	9%

Specification Grid for Summative Assessment

	Paper 1	Paper 2	Total
Skill 1 Knowledge &Comprehension	20%	10%	30%
Skill 2 Application &Analysis	40%	60%	100%
Skill 3 Synthesis &Evaluation	40%	30%	70%
Total	100%	100%	200%
Weighting	30%	40%	70%

SPECIFICATION GRID

ASSESSMENT OBJECTIVES	COMPONENTS		
	PAPER 1	PAPER 2	PAPER 3
1	+	-	+
2	+	-	+
3	+	+	+
4	-	+	+
5	+	+	+
6	+	+	+
7	-	+	+
8	+	+	+
9	+	+	+
10	+	-	+
11	+	-	+
12	+	-	+
13	-	+	+

APENDIX 1

Equipment Required for a Minimum of 15 Students

1. FACILITIES

- (i) Classroom
- (ii) Laboratory
- (iii) Library
- (iv) Workshop

The workshop must be purpose-designed

2. EQUIPMENT

- 2.1 10 Cutting Tables 1,80m x 90cm
- 2.2 Cutting tools
- 2.3 Sewing machines should have permanent positions and should be strong and steady:
 - 10 electric sewing machines
 - 10 manual sewing machines
 - 5 Industrial electric straight sewers
 - 1 speed adjustable heavy duty machine
 - 1 domestic and 1 industrial over-locker machine (safety)
 - 1 blind hemmer machine
- 2.4 Industrial pressing equipment
- 2.5 Dyeing and printing equipment
- 2.6 Designing equipment
- 2.7 Specialised tools

9.4 ASSESMENT MODEL

Learners will be assessed using both continuous and summative assessments.

