

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN DDGM
PROGRAMME CODE	08
COURSE TITLE	FUNDAMENTALS OF FASHION DRAWING
COURSE CODE	DD11201
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks
			Actual Contact Hrs./Week			SLH	NLH			Theory	Based on LL & TSL				Based on SL					
			CL	TL	LL						Practical				SLA					
						FA-TH	SA-TH			Total		FA-PR		SA-PR		Max	Min			
DD11201	FUNDAMENTALS OF FASHION DRAWING	DSC	3	-	4	1	8	4	03	30	70	100	40	50	20	-	-	25	10	175

Total IKS Hrs for Term: 0 Hrs

Abbreviations: CL-Classroom Learning, TL-Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA- Self Learning Assessment

Legends: @-Internal Assessment, #- External Assessment, *# - Online Examination, @\$ - Internal Online Examination

Note:

- FA-TH represents an average of two class tests of 30 marks each conducted during the semester.
- If a candidate is not securing minimum passing marks in FA-PR (Formative Assessment - Practical) of any course, then the candidate shall be declared as '**Detained**' in that semester.
 - If a candidate does not secure minimum passing marks in SLA (Self Learning Assessment) of any course, then the candidate shall be declared as '**fail**' and will have to repeat and resubmit SLA work.
 - Notional learning hours** for the semester are (CL + LL + TL + SL) hrs. * 15 Weeks
 - 1 credit** is equivalent to **30 Notional hours**.
 - * Self-learning hours shall not be reflected in the Timetable.
 - * Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

Fashion designers should have a thorough knowledge of the basic elements and principles of designing. Fashion is an instinct in people. The aspects of design affect differently to human beings of different age groups. In the fashion world, new designs are presented in the form of hand-drawn sketches before they're cut and sewn. Adding colour and details like ruffles, seams and buttons helps to bring your ideas to life. Fashion Illustration is the communication of fashion that originates with illustration, drawing and painting. Fashion drawing is an excellent method of developing and realizing our design ideas. It allows you to visually play with design lines and features without the need to make costly samples. The students of the diploma course should have the ability to design the styles for different figure types using proper elements and principles to create visual illusions & add to the presentation styles of individuals.

III. COURSE-LEVEL LEARNING OUTCOMES (CO'S)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

- CO1 - Select relevant dry & wet media for the drawing process using proper terms and techniques of presentation.
- CO2 - Illustrate proportionate male, female and child croqui of standard size.
- CO3 - Design the garment applying elements and principles of design.
- CO3 - Design the garment applying elements and principles of design.
- CO4 - Analyze the human figure types and their challenges and advise dressing to conceal human figure drawing.
- CO5 - Develop a colour wheel for different colour combinations/ schemes.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT –

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT 1 – BASICS OF DRAWING (CL Hrs. - 06, Marks -10)				
1.	TLO 1.1: Identify the dry & wet material & papers. TLO 1.2: Use artistic terms in Fashion drawing. TLO 1.3: Differentiate layout & presentation techniques in fashion drawing.	1.1. Dry and wet material, Fixatives, Types of paper. 1.2. Basic artistic terms highlight, shadow, reflected light, value, and vanishing point. , Importance of Light source. Creation of distance & depth.-Value, Illusion of forms, Negative forms 1.3. Techniques of layout & presentation. (positive & negative space) storyboards, working drawings, and Designer workboards.	Chalk-Board Site/Industry Visit Presentations Presentations	CO1
UNIT 2 – ELEMENTS OF ART AND FASHION DESIGN (CL Hrs. - 06, Marks -10)				
2.	TLO 2.1: Apply the concept of design elements for relevant creative designs. TLO 2.2: Select the appropriate form of design for the given sample.	2.1. Concept and definition of design. 2.2. All Elements of Design -- Line, Form, Space, Texture, Color & Shape – definition, types & application, use	Chalk-Board Site/Industry Visit Presentations Presentations	CO3

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT 3 – PRINCIPLES OF DESIGN (CL Hrs. - 09, Marks -20)				
3.	<p>TLO 3.1: Apply the principles of Design on garments.</p> <p>TLO 3.2: Differentiate between structural designs and decorative designs</p> <p>TLO 3.3: State the basic & novelty silhouettes for the given sample.</p>	<p>3.1. Different principles of design- Proportion, Rhythm, Balance, Harmony, Emphasis. Rhythm by repetition, Progression, Radiation, graduation, Repetition Harmony – pure and discord. Unity – concept development. Balance – formal and informal balance & radial, Emphasis.</p> <p>3.2 Types of Structural design and Decorative design.</p> <p>3.3 Definition of silhouette, Types of silhouette with their features. - Straight, Triangular, oval, wedge, hourglass, extreme volume etc.</p>	Cooperative Learning Case Study	CO3
UNIT 4 – COLOUR THEORIES AND HARMONIES (CL Hrs. - 10, Marks -10)				
4.	<p>TLO 4.1: State the colour terminology & its types.</p> <p>TLO 4.2: Differentiate between the additive & subtractive color perception.</p> <p>TLO 4.3: Use relevant harmony of colour to create the desired effect for a given sample.</p>	<p>4.1 Colour Terminology–Hue, Chroma, Value, Intensity, Tints, shades, Tones, Advancing and receding colour, Cool & warm colours.</p> <p>4.2 Newton's color theory. , Additive color theory & Subtractive color theory</p> <p>4.3 Color Harmonies triad, split complementary, complimentary, achromatic, monochromatic, analogous, cool & warm.</p>	Cooperative Learning Case Study	CO3
UNIT 5 – DO'S AND DON'TS OF STYLE (CL Hrs. - 14, Marks- 20)				
5.	<p>TLO 5.1: Enlist the difference between human and fashion figures.</p> <p>TLO 5.2: Analyze the dos and don'ts for different human figures.</p>	<p>5.1 Definition of standard figure.& Difference between Human & Fashion figure.</p> <p>5.2 Do's & Don'ts of style concerning colour, texture, prints, structural lines, and decorative lines.</p> <p>a) Women-Pear, diamond, round, hourglass inverted triangle, straight.</p> <p>b) Men-short & heavy, tall and heavy, tall & thin, athletic.</p>	Case Study Collaborative learning	CO2, CO4

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO1-Identify the process parameters for female fashion figures in front view.	Illustrate Female Mechanical Croque front & profile with 8 – 10 heads.	04	CO2
2	LLO2-Identify the process parameters formale fashion figures	Illustrate Male Mechanical Croque front & profile with 8 – 10 heads.	04	CO2
3	LLO3-Identify the process parameters for Child Mechanical croqui front and profile. (6yrs-14 yrs) figures	Illustrate the Child Mechanical Croque front& profile (6yrs -14 yrs)	04	CO2
4	LLO4- Use structural and decorative lines onFigures.	Illustrate the structural designs and Decorative designs. (use of garment templatesis permissible)	04	CO4
5	LLO5- Develop designs with different colourharmonies.	Render colour harmonies- complimentary, split complimentary, analogous, achromatic, monochromatic, double complimentary, triad colour scheme in shirtings, textile design(women's and kids)& garment elements.	20	CO5
6	LLO6 - Illustrate a color wheel.	Render an innovative colour wheel -24 colour. (poster Media)	08	CO5
7	LLO7- IIdentify three types of figure types. (Pear, Diamond, Round, Hourglass, Invert ed Triangle and straight)	Develop three different designs for each figure type(Pear, diamond, round, hourglass inverted triangle, straight) and illustrate the do's & don'ts for figure type and write the analysis of design concerning colour, texture, silhouette, style lines, textile prints, colours .(use templates)	16	CO4
Note: All the above samples can be developed from waste or left-out fabric to reduce wastage and practicesustainability.				

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Make a group of three students, take a client as per figure type, and suggest the do's and don'ts for them.
- Identify a classmate and make a weekly calendar of structural and decorative lines worn with a snap.
- Market survey for drawing material -types brands and prices. Report essential.
- Select a client and make a weekly calendar of colour harmonies of the client with snaps.

Assignment

- Use Graphic software for creating illusions on various figure types.
- Make a collage of garment elements & principles -from magazines

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Drawing Table and Drawing board	All
2	Easels for Drawing -2 ft width & 4 ft height with pallet and brush stand, adjustable canvas frames.	7

VIII.SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table)-

Sr. No	Unit	Unit Title	Aligned COs	Learning Hours	R-Level	U-Level	A-Level	Total Marks
1	I	Basics of Drawing.	CO1	06	3	5	2	10
2	II	Elements of Art and Fashion Design	CO3	06	4	4	2	10
3	III	Principles of Design	CO3	09	8	6	6	20
4	IV	Colour Theories and Harmonies	CO5	10	4	3	3	10
5	V	Do's & Don't's of style	CO2,CO4	14	8	6	6	20
Grand Total				45	27	24	19	70

IX.ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1. Progressive Test 2. Rubrics for practicals 3. Micro projects	1. End Term Examination (Theory) 2. Practical Examination

X. SUGGESTED COS- POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO1	2	-	-	2	-	-	2	-	1
CO2	1	-	-	2	-	-	2	-	1
CO3	3	2	2	2	2	-	3	-	1
CO4	3	2	2	2	1	-	2	-	1
CO5	2	2	2	2	1	-	2	-	1




Legends:- High:03, Medium:02, Low:01, No Mapping: - *PSOs are to be formulated at the institute level

XI. SUGGESTED LEARNING MATERIALS/BOOKS

Sr.No	Author	Title	Publisher
1	Barrington Barber	The Fundamentals of Drawing	Barnes and Noble books –New York, 2002
2	Angel Fernandez & GabrielMarketing	Drawing for Fashion designers	Pageone, Singapore
3	Patric John, Ireland	Fashion Design Drawing and presentation	B.T. Batsford, London
4	Anne Allen & Jalian Scaman	Fashion Drawing BasicPrinciples	B.T. Batsford, London
5	Loan Oei	Elements of Design, Rediscovering colours, Textures, forms & shapes	Thames & Hudson Ltd.,London
6	Drudi, Elisabetta 'Kuky'Paci, Tiziana	Figure Drawing For FashionDesign	Amsterdam, The Pepin Press,2010
7	Pankowski, Edith And Pankowski, Dallas	A Programmed Manual - Art Principles In Clothing	New York, The Macmillan Company, 1972
8	Kathryn Mckelvy.	Fashion Source Book	Blackwell ISBN 10:0632039930
9	Sandra Keiser	Beyond Design	Fairchild Books ISBN 9788160901-226-7
10	Bill Martine.	joy of drawing	ISBN 0-8230-2370-2

XII. LEARNING WEBSITES & PORTALS

Sr.No	Link/Portal	Description
1.	https://creativemarket.com/blog/20123/12/02/10-basic-elements-of-design , https://www.youtube.co	Elements, Color theory
2.	https://en.wikipedia.org/wiki/Additive_color	Additive Color Theory
3.	https://en.wikipedia.org/wiki/Subtractive_color	Subtractive Color Mixing
4.	https://en.wikipedia.org/wiki/Theory_of_Colours	Colour Theory
5.	http://www.fashionillustrationtribe.com/art-supplies-for-fashion-illustration	Language Of Fashion
6.	https://creativemarket.com/blog/20123/12/02/10-basic-elements-of-design	elements-of-design

Name & Signature:	
 Ms. Suchita E. Kurzekar Lecturer in DDGM (Course Experts)	
Name & Signature:	Name & Signature:
 Mr. S.S. Prabhune (Programme Head)	 Shri. S.B. Kulkarni (CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN DRESS DESIGNING AND GARMENT MANUFACTURING
PROGRAMME CODE	08
COURSE TITLE	SEWING TECHNIQUES PORTFOLIO
COURSE CODE	DD11202
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme						Credits	Paper Duration	Assessment Scheme									
			Actual Contact Hrs./Week			SLH	NLH	Theory			Based on LL & TSL				Based on SL		Total Marks			
			CL	TL	LL						FA-TH	SA-TH	Total	FA-PR		SA-PR		SLA		
						Max	Min	Max						Min	Max	Min	Max		Min	
DD11202	SEWING TECHNIQUES PORTFOLIO	SEC	-	-	4	2	6	3		-	-	-	-	50	20	50#	20	25	10	125

Total IKS Hrs for Term: 2 Hrs

Abbreviations: CL-Classroom Learning, TL-Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA- Self Learning Assessment

Legends: @-Internal Assessment, # - External Assessment,*# - Online Examination,@\$ - Internal Online Examination

Note:

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2. If a candidate does not secure minimum passing marks in SLA (Self Learning Assessment) of any course, then the candidate shall be declared as 'fail' and will have to repeat and resubmit SLA work.
3. Notional learning hours for the semester are (CL + LL + TL + SL) hrs. * 15 Weeks
4. 1 credit is equivalent to 30 Notional hours.
5. * Self-learning hours shall not be reflected in the Timetable.
- 6.* Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

The skill training starts with making hand stitches in the given fabric, stitching the following using the given fabric:

Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Necklines, Placket, Pocket, Collar, Sleeves, Cuff. For a well-finished garment, knowledge of different components is essential. This preliminary course aims at building a foundation for sewing garments for various categories in the future. The course covers the knowledge and application of various garment components which finally enables the student to use them in suitable designs. The student will be able to fix the fasteners on the given fabric, mend the given fabrics per requirement and able to draft a pattern for different garments.

III. COURSE-LEVEL LEARNING OUTCOMES (CO'S)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

CO1- Make different types of seams and seam finishes.

CO2- Make various types of tucks, darts, ruffles, and flounces.

CO3- Construct different types of plackets, necklines, zippers, and waistlines.

CO4- Apply various types of collars.

CO5- Apply different types of sleeves and sleeve finishes.

CO6- Assemble various types of pockets.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT –

NOT APPLICABLE

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO 1.1 Machining on paper and fabric. LLO 1.2 Identify the tools for machining. LLO 1.3 Select process parameters for machining. LLO 1.4 Practice the idea on Paper and fabric for the given sample.	Machining on paper, Machine Practice On fabric.	2	CO1
2	LLO 2.1 Identify the stitch samples for the given seams. LLO 2.2 Select process parameters for different seams. LLO 2.3 Create stitch samples for the given seams.	Stitch samples of Seams – Plain Seam, French, Mock seams, Flat felled seam, Clean finish and Hong Kong finish.	4	CO1
3	LLO 3.1 Identify the decorative seams for the given sample. LLO 3.2 Select process parameters for different decorative seams. LLO 3.3 Construct samples for decorative seams.	Decorative Seams Corded Seams Seaming Interfacings Cross Seams.	2	CO1
4	LLO 4.1 Identify seams for special fabrics. LLO 4.2 Select process parameters for different seams for special fabrics. LLO 4.3 Stitch Seams for special fabrics.	Seams for special fabrics Stitch sample of Gathering / Sheering Ruffles & Flounces Blindtucks.	4	CO1 CO2

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
5	LLO 5.1 Identify the darts for the given sample. LLO 5.2 Select process parameters for different darts. LLO 5.3 Create darts on the bodice for the given sample.	Stitch sample of Darts – Contour and French darts.	4	CO2
6	LLO 6.1 Identify the necklines with facing and piping. LLO 6.2 Select process parameters for different sewing of necklines with facing and piping. LLO 6.3 Make a Sample of Necklines with facing and piping.	Sewing of necklines with facing and piping.	4	CO3
7	LLO 7.1 Identify the types of plackets. LLO 7.2 Select process parameters for different plackets. LLO 7.3 Construct a placket for the given sample.	Stitch sample of placket (faced placket/ Lapped placket).	6	CO3
8	LLO 8.1 Identify the types of zippers. LLO 8.2 Select process parameters for different zippers. LLO 8.3 Sew the zipper for the given sample.	Stitch sample of conventional zipper invisible zipper fly opening.	6	CO3
9	LLO 9.1 Identify the types of waistlines. LLO 9.2 Select process parameters for different waistlines. LLO 9.3 Construct different types of waistbands for the given sample.	Sewing of waistline with waistband, waistline with facing.	6	CO3
10	LLO 10.1 Identify the different types of collars. LLO 10.2 Select process parameters for different collars. LLO 10.3 Sew types of collars for a given sample.	Stitch sample of Flat collar, Rolled and Shawl collar.	8	CO4
11	LLO 11.1 Identify the different types of sleeve patterns. LLO 11.2 Select process parameters for different sleeve patterns. LLO 11.3 Stitch various sleeve patterns for a given sample.	Stitch sample of short sleeve (Set-In method), Shirt sleeve with shirt cuff placket, Puff Sleeve, Tulip Sleeve.	8	CO5

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
12	LLO 12.1 Identify the various Pockets patterns. LLO 12.2 Select process parameters for different Pocket patterns. LLO 12.3 Construct various Pockets patterns for a given sample.	Stitch sample of patch pocket with flap Slashed and Bound pockets / Welt pockets Inseam pocket.	6	CO6
Note: All the above samples can be developed from waste or left-out fabric to reduce wastage and practicesustainability.				

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Design and develop Table cover, Belt, chair back cover, and any one article from the above technique.

Assignment

- Compile a portfolio of the above samples.
- Prepare a journal of any three components other than the above practicals.

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Measuring Tools – Scale Triangle, Measuring tape, Flexi tape, French curve.	All
2	Tracing Tools – Tailors Chalk Tracing paper, Carbon Paper, Tracing wheel.	All
3	Cutting Tools – Scissors, Shears, Pinking Shears.	All
4	Sewing Tools - Sewing Thread Hand Needle and Machine Needles-16 no.	All
5	Pressing Tools: Regular and Steam Press Iron.	All
6	Zipper feet: Standard Zipper, Invisible Zipper and Adjustable Zipper.	All
7	Fabric: Muslin Fabric or Cotton Fabric.	All
8	Sewing Machine-Single needle lock stitch machine.	All

VIII.SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table)-

NOT APPLICABLE

IX. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1. Assignment 2. Midterm Exam 3. Self-Learning 4. Term Work 5. Seminar/Presentation	1. End Term Exam 2. Micro-project

X. SUGGESTED COS- POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO1	3	1	-	1	-	1	1	1	1
CO2	3	1	1	-	1	1	1	1	-
CO3	3	-	1	-	-	-	-	-	1
CO4	3	1	1	1	-	1	-	1	-
CO5	3	2	1	1	1	1	1	1	1
CO6	2	2	3	-	-	-	1	1	1

Legends:- High:03, Medium:02, Low:01, No Mapping: - *PSOs are to be formulated at the institute level

XI.SUGGESTED LEARNING MATERIALS/BOOKS


Sr.No	Author	Title	Publisher
1	Reader's Digest	New Complete Guide To Sewing. [StepBy-Step Techniques For Making Clothes And Home Accessories] New York-The Reader's Digest Association (Canada) Ltd., 2002, ISBN No.9781606522080.	New Complete Guide To Sewing. [StepBy-Step Techniques For Making Clothes And Home Accessories] New York-The Reader's Digest Association (Canada) Ltd., 2002, ISBN No:9781606522080.
2	Singer	Singer Sewing Step By Step U.S.A, Cy Decosse Incorporated,1990, ISBN-13: 978- 0865732575.	Singer Sewing Step By Step U.S.A, Cy Decosse Incorporated,1990, ISBN-13: 978- 0865732575.
3	Smith Alison	The Sewing Book: Dressmaking, Soft Furnishing, Best Tools Step-By-Step Techniques, Creative Project London, Dorling Kindersley Limited, 2009, ISBN-13: 978-0241313633.	The Sewing Book: Dressmaking, Soft Furnishing, Best Tools Step-By-Step Techniques, Creative Project London, Dorling Kindersley Limited, 2009, ISBN-13: 978-0241313633.

Sr.No	Author	Title	Publisher
4	Lester, Nicky Messenger, Jack - Ed.	Dressmaking - Skills, Techniques & Design: A Duke Of Edinburgh's Award Guide	Bristol, Purnell Publishers Limited / Sampson Low, 1983, ISBN 13: 9780562001516.
5	Cooklin Gerry	Garment Technology for fashion designers	Black Well Science Ltd, 1997, England, ISBN No. 978-1-4051-9974-2. 208.
6	Shaeffer Claire	Sewing for the Apparel Industry	Pearson Publications, 2002, ISBN No. 13: 978-0131884434.
7	Aitken Leila	Step-by-step dressmaking course	BBC Books, 1992, England ISBN No. 9781409352617.
8	Barbara Latham Carr Herald	The Technology of Clothing Manufacture	Om Book Service, Eng, 1994 ISBN No. 978- 1-4051-6198-5.344.


XII. LEARNING WEBSITES & PORTALS

Sr.No	Link/Portal	Description
1.	http://www.sewing.org	Small Sewing Project.
2.	http://fashion2apparel.blogspot.com	Sewing Techniques.
3.	https://threadtheory.ca	Garment Finishing Techniques.
4.	https://sewguide.com/pattern-making-books/	Sewing Guide Techniques.
5.	https://sewport.com/learn/pattern-making	Basic Pattern Making.
6.	https://shoutoutla.com/meet-anita-morris-author-speaker-sewing-instructor/	Basic Pattern.


Name & Signature:


Mrs. C. M. Ambikar
 Lecturer in DDGM
 (Course Experts)

Name & Signature:


Mr. S.S. Prabhune
 (Programme Head)

Name & Signature:


Shri. S.B. Kulkarni
 (CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN DDGM
PROGRAMME CODE	08
COURSE TITLE	TECHNIQUES OF PATTERN MAKING
COURSE CODE	DD11203
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks
			Actual Contact Hrs./Week			SLH	NLH			Theory	Based on LL & TSL				Based on SL					
			CL	TL	LL						Practical				SLA					
			FA-TH	SA-TH	Total		FA-PR			SA-PR	SLA									
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min											
DD11203	TECHNIQUES OF PATTERN MAKING	DSC	-	-	6	2	8	4	-	-	-	-	50	20	50#	20	25	10	125	

Total IKS Hrs for Term: 2 Hrs

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4. 1 credit is equivalent to 30 Notional hours.
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- 6.* Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

Pattern Making is an art. It is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of a human figure. Pattern making is a bridge function between design and production. A sketch can be turned into a garment via a pattern that interprets the design in the form of the garment components.

III. COURSE-LEVEL LEARNING OUTCOMES (CO'S)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

- CO1- Apply different human body measurements to draft a pattern.
- CO2- Apply different pattern-making techniques for drafting.
- CO3- Develop patterns with various garment components.
- CO4- Develop basic bodice blocks with single and two-dart series.
- CO5- Develop advanced patterns manually incorporating different components of garments.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT.

NOT APPLICABLE

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO 1.1 Identification of body parts and figure types. LLO 1.2 Measure critical dimensions of the human body and dress for them.	Record suitable measurements of the human body and Dress form for a given pattern (Girth Measurements, Bust, Waist, Hip and Length measurements- Shoulder Length, Natural waist Length, Waist Hip Length, Waist to Knee and Waist to Floor Length).	4	CO1
2	LLO 2.1 Select suitable methods of measuring a human body and dress form. LLO 2.2 Implement a selected method of measuring a human body and dress form for a given sample.	Implement Methods of Measuring Body and Dress Form. (Pattern Development from Drape and Measurements)	6	CO1
3	LLO 3.1 Read the different brand size charts. LLO 3.2 Correlate the sizes and measurements as per standard charts.	Relationship of Sizes and Measurement as per size standard chart (Indian and Western) study the various brand size charts.	4	CO1
4	LLO 4.1 Identify the Tools, Terminology and Symbols of Pattern Making. LLO 4.2 Use terminology, tools and Symbols in pattern-making for a given sample.	Implement Tools, Terminology and Symbols of Pattern Making.	6	CO1
5	LLO 5.1 Identify the Tools, Terminology and Symbols of Flat Pattern Making. LLO 5.2 Identify the Tools, Terminology and Symbols of the Direct drafting method. LLO 5.3 Identify the Tools, Terminology and Symbols of the Draping Method. LLO 5.4 Prepare the pattern from the Flat Pattern Method for the given sample. LLO 5.5 Prepare the pattern from the Direct drafting method for the given sample. LLO 5.6 Prepare the pattern from the Draping Method for the given sample.	Draft the Patterns achieved by three methods: Flat Pattern Method, Direct drafting method, Draping Method(Basic Bodice and Skirt)	6	CO2

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
6	LLO 6.1 Identify patterns for easy-fitting bodice block. LLO 6.2 Make the patterns for easy fitting bodice block for the given sample.	Prepare the pattern for the Basic Bodice: Easy-fitting bodice block.	4	CO2
7	LLO 7.1 Identify the patterns for the Close-fitting bodice block LLO 7.2 Make the patterns for the Close-fitting bodice block.	Prepare the pattern for the Basic Bodice: Close-fitting bodice block.	4	CO2
8	LLO 8.1 Identify the patterns for the Sleeveless bodice block. LLO 8.2 Make the patterns for the Sleeveless bodice block for the given sample.	Prepare the pattern for the Basic Bodice: Sleeveless bodice block.	4	CO2
9	LLO 9.1 Identify the elements of garment detailing like Types of Darts, Pleats, Gathers and Tucks on the garment. LLO 9.2 Develop Garment Details like Types of Darts, Pleats, Gathers and Tucks for the given practical situation.	Develop Garment Details like Types of Darts, Pleats, Gathers and Tucks on garments.	10	CO3
10	LLO 10.1 Identify the Garment Detailing types of Collars for the given situation. LLO 10.2 Implement Garment Detailing types of Sleeve for the given situation. LLO 10.3 Identify the Garment Detailing types of Placket for the given situation. LLO 10.4 Identify the Garment Detailing types of Pocket for the given situation. LLO 10.5 Identify the Garment Detailing types of Cuffs for the given situation. LLO 10.6 Identify the Garment Detailing types of Yoke for the given situation.	Implement Garment Details like types of Collars (Peter Pan, Flat Collar and Shirt Collar), Placket (Placket Placement- One Piece and Two Piece Placket), Pocket (Pocket Placement- Patch and Inseam Pocket), Cuff, Yoke, and Sleeve (Plain, Puff, Half and Full Sleeve) Draft using basic blocks of Sleeve and Collars. (Use any 4 various neckline variations).	12	CO3
11	LLO 11.1 Identify the one-piece block using the flat pattern drafting method. LLO 11.2 Draft the one-piece block using the flat pattern drafting method.	Prepare the One-piece block using the flat pattern drafting method.	6	CO2

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
12	LLO12.1 Identify process parameters and elements of the Pivote method for dartmanipulation. LLO 12.2 Use the Pivote method for dart manipulation for the given situation.	Use Dart Manipulation Technique: Pivote Method for the darts (Single dart)- Neck, Shoulder, Armhole, Side Seam and Waistline	2	CO4
13	LLO 13.1 Identify the elements of the slash and spread method of dart manipulation. LLO 13.2 Use the slash and spread method for dart manipulation for the given situation.	Use Dart Manipulation Technique: Slash and Spread Method (Single dart)- Neck, Shoulder, Armhole, Side Seam and waistline	4	CO4
14	LLO 14.1 Identify the elements of Garment Fitting checks as per body contours. LLO 14.2 Identify the elements of applying Evaluating Fit of body parts e.g. neckline, arm round etc. LLO 14.3 Identify the Methods of Fitting (Test fit, After the garment.) LLO 14.4 Prepare a pattern using the One Point Dart Manipulation Technique applying Garment Fitting checks as per body contour applying evaluating the Fit of body parts and Methods of Fitting - (Test fit, After the garment)	Prepare a pattern using the One Point Dart Manipulation Technique applying Garment Fitting checks as per body contour applying evaluating Fit of body parts e.g. neckline, arm round etc. and Methods of Fitting - (Test fit, After the garment) (prepare for one bodice block on muslin shell)	6	CO4
15	LLO 15.1 Identify the elements of the two-point dart manipulation technique in the garment. LLO 15.2 Use a two-point dart Manipulation Technique for fitting of Garment for the given situation.	Implement the two-point dart Manipulation Technique for fitting of Garment (prepare for one bodice block on a muslin shell).	12	CO4
<p>Note: 1. Take any 13 Practicals/tutorials out of 15 and ensure that all the units are covered. 2. Take the Practicals/tutorial in a batch size of 20 to 30 students. 3. Give students at least 10 problems to solve in each practice/ tutorial.</p>				

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Identify your classmates and analyze the fitting problems.
- Make a library collection of garment details.
- Develop patterns using the dart Manipulation.

Assignment

- Collect pictures of various figure types from newspapers and magazines.
- Check your wardrobe, what are the various fit issues you can identify and Prepare handouts.
- Collect pictures of women's clothing, prepare a style file and identify the darts used.
- Find the different pattern-making tools on the internet/ library books and prepare a scrapbook.

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Fibreglass Dress Form:- Female and male. Female size -40, Male size -42. Dress Forms: It is a standardized duplication of a human form. It is cotton-padded, canvas-covered and set on a movable stand. It is used to take measurements, develop patterns and fit garment samples.	All
2	Rulers:- 12"/24" wooden, metal or plastic rulers. It is used for drawing straight lines per measurement. The marking and divisions on the ruler should be clear and accurate. Tailors square/ 'L' Square: - It is a 24"x 144" metal or plastic ruler with two arms that form a 90-degree angle. It is used to find a 45-degree angle mark outside and inside corners and extend the line through corners.	All
3	French Curve:- It is a curved plastic or metal ruler. - It is used to draw curved lines of armholes and necklines	All
4	Pin Holder :- Plastic/Wood material is used to hold pins and needles for easy accessibility and storage.	All
5	Hip Curve:- It is a curved plastic or metal ruler available in different sizes.	All
6	Scissors:- It is a cutting tool, having a size of 8" to 12", with two sharply pointed straight blades. Used to cut paper patterns and fabric.	All
7	Notcher:- It is a punching tool that makes 'U' shaped notch marks. It is used to make 'U' shaped notch marks, which indicate seam allowance, central lines, etc. It looks like a single-punch machine	All
8	Tailors' Chalk: These chalks can be rubbed off easily when used on the fabric surface. It is available in various colours with fine edges. It is used for marking the lines and design details on the fabric.	All
9	Tracing Wheel:- It is a toothed metal wheel with a wooden or plastic handle. It is used to transfer lines from one pattern to another or from the final pattern to the fabric.	All
10	Pins & Pin Holder:- Pins and small stuffed pillows are also required in pattern-making	All
11	Stiletto:- It is a metal rod with a tapering needle point end and a wooden or plastic handle. It is used for punching dart ends on patterns, marking the placement of pockets, trimmings, bands etc patterns	All
12	Thick Brown Paper:- These are brown paper rolls or sheets of various sizes and thicknesses. Used for preliminary pattern drafting and the development of the final pattern. - Strong and thick ones are used for making patterns that can be used repeatedly.	All

VIII.SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE
(Specification Table)-

NOT APPLICABLE

IX.ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1. Assignment, Self-learning 2. Terms work 3. Seminar/Presentation	1. End of Term Examination (PR)

X. SUGGESTED COS- POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Program me Specific Outcomes *(PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO1	3	2	2	1	-	-	1	3	3
CO2	3	-	-	2	-	-	1	3	3
CO3	2	-	-	2	-	-	1	2	3
CO4	2	-	-	2	-	-	1	2	2
CO5	2	1	2	2	1	1	1	1	2

Legends:- High:03, Medium:02, Low:01. No Mapping: - *PSOs are to be formulated at the institute level

XI.SUGGESTED LEARNING MATERIALS/BOOKS

Sr.No.	Author	Title	Publisher
1	Joseph-Armstrong, Helen	Patternmaking For Fashion Design 5th Edn	New Delhi, Pearson India Education Services Pvt. Ltd., 2016; ISBN-13: 978-9332518117, ISBN-10: 933251
2	Aldrich, Winifred	Metric Pattern Cutting For Women's Wear Edition. 5th	UK, Blackwell Publishing, 2008; ISBN-10.1405175672; ISBN-13. 978-1405175678
3	Amaden-Crawford, Connie	The Art of Fashion Draping	New Delhi, Om Books International, 2005; ISBN: 9781501330292, 1501330292.

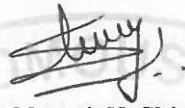
Sr.No.	Author	Title	Publisher
4	Di Marco, Sally M.	Draping Basics	New York, Fairchild Books, 2010; ISBN 10: 1563677369 ISBN 13: 9781563677366.
5	Jaffe, Hilde Relis, Nurie Torre, Rosemary- Illustrator	Draping For Fashion Design	New Jersey, Pearson Education Inc., 2005; ISBN. 9780131109377
6	Zarapkar System of Cutting	Zarapkar System Of Cutting	Sale Publishers, Bombay ISBN: 9788124301999
7	Gillian Holman	Pattern Cutting Made Easy	Blackwell Science Ltd., London ISBN:9781849940733
8	Natalie Bray	More Dress Pattern Designing	Blackwell Science Ltd., London ISBN:9780632065028
9	Tomoko Nakamichi	Pattern Magic	Laurence King Publishing; Genre. Design ; ISBN · 9781856698276, 9781856698276; Edition · 2012.
10	Gareth James, Daniela Witten, Trevor Hastie Robert and Tibshirani	An Introduction to Statistical Learning with Applications in R	SpringerNewYorkHeidelbergDordrecht LondonISBN978-1-4614-7137-0 ISBN978-1-4614-7138-7 (eBook)
11	Gunakar Muley	Sansar Ke Mahan Ganitagya	First Edition, Rajkamal Prakashan, ISBN-10. 8126703571, ISBN-13.978-8126703579
12	T.S. Bhanumurthy	A Modern Introduction to Ancient Indian Mathematics	New Age International Private Limited, 1January2008ISBN-10.812242600X, ISBN-13.978-8122426007
13	M.P. Trivedi and P. Y. Trivedi	Consider Dimension and Replace Pi	Notion Press; 1st edition (2018), ISBN-978-1644291795

XII. LEARNING WEBSITES & PORTALS

Sr.No	Link/Portal	Description
1.	https://cbseacademic.nic.in/web_material/publication/cbse/41BasicPatternDevelopment-XII.pdf	Garment Fitting Problems And Solution
2.	https://www.studiestoday.com/node/211495/viewfile.html	Terminology of Pattern Making
3.	https://www.shopkobieta.com/pages/measurement-guide-sizing	Size Chart and Measurement Guide.
4.	https://www.fibre2fashion.com/industry-article/5658/basics-of-pattern-making	Pattern Making Introduction

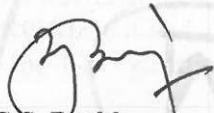
Sr.No	Link/Portal	Description
5.	https://textilelearner.net/garment-pattern-making-techniques	Pattern Making Tools
6.	https://www.brainkart.com/article/Method-of-Pattern-Making_35615/	Methods of Pattern Making
7.	https://www.cbse.gov.in/cbsenew/ebooks/3_XII_Text_Book.pdf	Pattern-Making and Draping Techniques

Name & Signature:



Mrs. Shubhangi. N. Shinde
Lecturer in DDGM
(Course Experts)

Name & Signature:



Mr. S.S. Prabhune
(Programme Head)

Name & Signature:



Shri. S.B. Kulkarni
(CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN CE/EE/ET/ME/MT/CM/IT/DDGM
PROGRAMME CODE	01/02/03/04/05/06/07/08
COURSE TITLE	COMMUNICATION SKILLS (ENGLISH)
COURSE CODE	HU11201
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks
			Actual Contact Hrs./Week			SLH	NLH			Theory			Based on LL & TSL				Based on SL			
			CL	TL	LL					FA-TH	SA-TH	Total		FA-PR		SA-PR		SLA		
			Max	Max	Max	Min	Max					Min	Max	Min	Max	Min	Max	Min		
HU 11201	COMMUNICATION SKILLS (ENGLISH)	AEC	03	-	02	01	06	03	03	30	70	100	40	25	10	--	--	25	10	150

Total IKS Hrs for Term: 0 Hrs

Abbreviations: CL-Classroom Learning, TL-Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA- Self Learning Assessment

Legends: @-Internal Assessment, # - External Assessment.*# - Online Examination. @\$ - Internal Online Examination

Note:

FA-TH represents an average of two class tests of 30 marks each conducted during the semester.

1. If a candidate is not securing minimum passing marks in FA-PR (Formative Assessment - Practical) of any course, then the candidate shall be declared as 'Detained' in that semester.
2. If a candidate does not secure minimum passing marks in SLA (Self Learning Assessment) of any course, then the candidate shall be declared as 'fail' and will have to repeat and resubmit SLA work.
3. Notional learning hours for the semester are (CL + LL + TL + SL) hrs. * 15 Weeks
4. 1 credit is equivalent to 30 Notional hours.
5. * Self-learning hours shall not be reflected in the Timetable.
- 6.* Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

The most commonly used medium to express oneself is language. English is a global language used in all spheres of human life i.e. personal, professional and social. English Language proficiency focuses on strong reading, writing, speaking and listening skills. It will include grammar, vocabulary, comprehension and describing skills to enhance overall language proficiency. English for professional purposes aim to equip the students with the necessary language skills required for Public Speaking, presentation and negotiation. English for academic purposes will include academic writing skills and critical thinking considering the need of students to communicate in the engineering domain.

III. COURSE-LEVEL LEARNING OUTCOMES (COS)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

- CO1: Construct grammatically correct sentences in English.
- CO2: Compose paragraphs and dialogues on given situations.
- CO3: Comprehend passages correctly.
- CO4: Use contextual words in English appropriately.
- CO5: Deliver effective presentations in English using appropriate body language.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

Sr. No	Theory Learning Outcomes (TLO's) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT I VOCABULARY (CL Hrs. -10, Marks-12)				
1.	TLO 1.1 Use transcription to pronounce words correctly. TLO 1.2 Use prefixes and suffixes for flexibility and precision in language. TLO 1.3 Employ synonyms and antonyms to express similarity and contrast between words. TLO 1.4 Use Homophones to expand their vocabulary. TLO 1.5 Make use of the collocations correctly.	1.1 Phonetics: Vowels (12), Consonants (24), Diphthongs (8) 1.2 Prefix & Suffix: Definition & Examples, List of common prefixes and suffixes 1.3 Synonyms & Antonyms: Vocabulary expansion, context & Usage 1.4 Homophones: Identifying Homophones, Meaning & Context, Vocabulary Expansion 1.5 Collocations: Definition & identification, types of collocations.	Language Lab Drill, Classroom learning, Reference Books & NPTEL.	CO1
UNIT II PARAGRAPH AND DIALOGUE WRITING (CL Hrs. -06, Marks-12)				
2.	TLO 2.1 Formulate paragraphs with Synchronized sentence structure on the given situation/topic. TLO 2.2 Develop dialogues to practice language skills in a structured and meaningful way.	2.1 Types of paragraphs: Technical, Descriptive and Narrative 2.2 Dialogue Writing: i. Greetings ii. Development iii. Closing Sentence.	Classroom learning Skit, Language Lab, YouTube & videos	CO2
UNIT III COMPREHENSION - SEEN AND UNSEEN PASSAGES (CL-Hrs. - 16, Marks-24)				
3.	TLO 3.1 Respond to the given questions of the specified passage. TLO 3.2 Formulate sentences using new words TLO 3.3 Use correct syntax to construct meaningful sentences for the given situation. TLO 3.4 Interpretation of passages in written and Spoken Form.	3.1 Passages from MSBTE workbook 1. Say No to Plastic bags 2. Interview of Dr. APJ Abdul Kalam 3. Maximum Achievements 4. Be Remarkable 5. Arunima Sinha: A Biography 6. Roses of Gratitude 3.2 Importance of Comprehension 3.3 Unseen Passages 3.4 Interpretation of passages in written and Spoken Form.	Classroom learning, interactive sessions & discussion	CO3

UNIT- IV COMMUNICATIVE LANGUAGE (CL-Hrs. -07, Marks-14)				
4.	TLO 4.1 Describe technical objects with specifications. TLO 4.2 Explain the given picture in grammatically correct language. TLO 4.3 Diary Entry on situations. TLO 4.4 Translate from English to Marathi/Hindi- and vice versa.	4.1 Technical objects: i. Heading ii. Description of Technical objects. 4.2 Picture Description: i. Situational picture. ii. Describe in your own words 4.3 Diary Entry : i. Date ii. Content iii. Name of the writer 4.4 Translation of paragraph from English to Marathi/Hindi-Vice versa (Question not to be asked on Translation in Theory Examination)	Language Lab, Pictures on situations and classroom learning.	CO4
UNIT- V PRESENTATION SKILLS (CL Hrs. - 06, Marks- 08)				
5.	TLO 5.1 Cultivate/Develop the habit of being presentable TLO 5.2 Formulate speeches for occasions TLO 5.3 Prepare PowerPoint presentation TLO 5.4 Use appropriate body language for effective communication	5.1 Dressing & Grooming : i. Dressing for the occasion, ii. Proper grooming 5.2 Speech Writing: i. Situation ii. Salutations iii. Introduction of the topic iv. Description/Body v. Conclusion 5.3 PowerPoint Presentation: i. Layout ii. Font size iii. Colour combination 5.4 Kinesics : i. Facial expressions ii Eye contact iii Postures iv Gestures	Classroom Learning & Language Lab.	CO5

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/ TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO 1.1 Use transcription in the correct form. LLO 1.2 Learn to differentiate vowels, diphthongs and consonants.	Write 20 words using phonetic transcription.	2	CO1
2	LLO 2.1 Learn the correct pronunciation by using headphones in the language lab.	Practice pronunciation as per IPA using language lab.	2	CO1

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
3	LLO 3.1 Enhance the understanding of word formation. LLO 3.2 Enrich word power. LLO 3.3 Construct words with the specific meanings.	Formulate 20 words using Prefix and Suffix.	2	CO1
4	LLO 4.1 Use words and phrases effectively. LLO 4.2 Enrich vocabulary. LLO 4.3 Develop overall language skills.	Construct sentences using 20 collocations.	2	CO1
5	LLO 5.1 Articulate ideas clearly and effectively. LLO 5.2 Improve grammar and punctuation.	Write two paragraphs of 75 words each.	2	CO3
6	LLO 6.1 Add depth to narratives. LLO 6.2 Form grammatically correct sentences.	Compose situational dialogues. (Any Two)	2	CO3
7	LLO 7.1 Promote the development of effective communication skills. LLO 7.2. Improve non-verbal communication Skills. LLO 7.3 Enhance interpersonal skills. LLO 7.4 Build confidence.	Enact Role Plays as per situation and context.	2	CO5
8	LLO 8.1 Acquire the ability to convey complex ideas clearly and concisely. LLO 8.2 Expand technical vocabulary. LLO 8.3 Enhance the written communication Skills.	Describe any three technical objects using correct grammar.	2	CO1 CO3
9	LLO 9.1 Develop storytelling skills. LLO 9.2 Connect with the audience.	Narrate anecdotes of various situations in English.	2	CO5
10	LLO 10.1 Notice and articulate specific elements, colours, shapes, & other visual aids. LLO 10.2 Express observations & interpretations clearly and concisely. LLO 10.3 Enhance vocabulary.	Describe a given picture. (Any Two)	2	CO1 CO4
11	LLO 11.1 Express information coherently and engagingly. LLO 11.2 Build confidence.	Introduce oneself and others.	2	CO5

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
12	LLO 12.1 Present complex information in a clear & concise manner. LLO 12.2 Develop public speaking skills and presentation skills.	Prepare a PowerPoint presentation on a given topic.	2	CO5
13	LLO 13.1 Improve language skills & expand vocabulary.	Translate paragraph --English to Marathi/Hindi (vice -Versa) (Any4)	2	CO1 CO3
14	LLO 14.1 Reflect on thoughts, feelings, and experiences.	Write your experience in 50 words on (Four) given situations (Diary Entry)	2	CO3 CO5
15	LLO 15.1 Develop language acquisition.	Respond to the questions based on the given passages.	2	CO2
16	LLO 16.1 Build confidence in public speaking. LLO 16.2 Enhance the skills in planning and prioritization.	Deliver oral presentations using correct grammar and appropriate body language.	2	CO5

Note: Any 12 out of 16 practical's are compulsory.

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Report different types of episodes/anecdotes.
- Seminar preparation and presentations.
- Make a Podcast episode based on Indian Freedom Fighters.
- Summarize the editorial columns of English newspapers.
- Summarize the content of an eminent person's biography/autobiography. Write a review on the following: Short stories, Novels and Films.
- Prepare a booklet on the contribution of eminent Indian scientists.
- Prepare a podcast referring to Bhagwat Geeta.
- Prepare blogs, podcasts, vlogs.
- Prepare a questionnaire & conduct interviews of Industry Personnel, social workers, and entrepreneurs
Prepare and participate in debates and extempore speeches.

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Language Lab with relevant software and Computer system with all necessary components like; motherboard, random access memory (RAM), Read-only memory (ROM), Graphics cards, sound cards, internal hard disk drives, DVD drive, network interface card	All
2	LCD Projector with document reader	All
3	Smart Board with networking	All

VIII.SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE
(Specification Table)

Sr. No	Unit	Unit Title	Aligned COs	Learning Hours	R-Level	U-Level	A-Level	Total Marks
1	I	Vocabulary	CO1	10	2	4	6	12
2	II	Paragraph and Dialogue Writing	CO2	6	2	4	6	12
3	III	Comprehension (Seen and Unseen Passages)	CO3	16	5	6	13	24
4	IV	Communicative Language	CO4	7	2	4	8	14
5	V	Presentation Skills	CO5	6	2	2	4	8
Grand Total				45	13	20	37	70

IX.ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1. Tests 2. Rubrics for COs 3. Assignment 4. Midterm Exam 5. Self-Learning 6. Term Work 7. Seminar/Presentation	1. End Term Exam 2. Micro-project 3. Tutorial Performance

X. SUGGESTED COs- POs MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)		
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2	PSO-3
CO1	1	1	-	-	-	2	1			
CO2	1	1	-	-	-	2	1			
CO3	1	1	-	-	-	2	1			
CO4	1	1	-	-	-	2	1			
CO5	1	1	-	-	-	2	1			

Legends:- High:03, Medium:02, Low:01, No Mapping: -
*PSOs are to be formulated at the institute level


XI. SUGGESTED LEARNING MATERIALS/BOOKS


Sr. No	Author	Title	Publisher
1	MSBTE	Spectrum, G Scheme and I-Scheme	MSBTE
2	Kumar, E. Suresh, Sreehari, P. Savitri	Effective English with CD	Pearson Education
3	Gnanamurli	English Grammar at a Glance	S. Chand
4	CBSE	English Communicative (class X)	Golden
5	Dr. Anjana Tiwari	Communication Skills in English	Khanna Publishers, New Delhi

XIII. LEARNING WEBSITES & PORTALS

Sr. No	Link/Portal	Description
1.	http://nptel.ac.in/courses/106102064/1	Online Learning Initiatives by IITs and IISc
2.	www.scilab.org/-SCILab	Signal processing, statistical analysis, and image enhancement.
3.	www.mathworks.com/product/matlab/-MATLAB	Applications of concepts of Mathematics to coding.
4.	Spreadsheet Applications	Use of Microsoft Excel, Apple Numbers, and Google Sheets.
5.	https://ocw.mit.edu/	MIT Courseware

Name & Signature:


Mr. V.V. Kulkarni
 Lecturer in English



Dr. S. P. Palve
 Lecturer in English

(Course Experts)

Name & Signature:


Mr. S.S. Prabhune
 (Programme Head)

Name & Signature:


Shri. S.B. Kulkarni
 (CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN DDGM
PROGRAMME CODE	08
COURSE TITLE	FIBRE SCIENCE
COURSE CODE	DD21201
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks
			Actual Contact Hrs./Week			SLH	NLH			Theory			Based on LL & TSL				Based on SL			
			CL	TL	LL					FA-TH	SA-TH	Total	Practical		SLA					
						Max	Min						Max	Min	Max	Min				
DD21201	FIBRE SCIENCE	AEC	3	-	-	1	4	2	03	30	70	100	40	-	-	-	-	25	10	125

Total IKS Hrs for Term: 2 Hrs

Abbreviations: CL-Classroom Learning, TL-Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA- Self Learning Assessment

Legends: @-Internal Assessment, # - External Assessment, *# - Online Examination. @\$ - Internal Online Examination

Note:

FA-TH represents an average of two class tests of 30 marks each conducted during the semester.

- If a candidate is not securing minimum passing marks in **FA-PR** (Formative Assessment - Practical) of any course, then the candidate shall be declared as '**Detained**' in that semester.
- If a candidate does not secure minimum passing marks in **SLA** (Self Learning Assessment) of any course, then the candidate shall be declared as '**fail**' and will have to repeat and resubmit SLA work.
- Notional learning hours** for the semester are (CL + LL + TL + SL) hrs. * 15 Weeks
- 1 credit** is equivalent to **30 Notional hours**.
- * Self-learning hours shall not be reflected in the Timetable.
- * Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

Textile is an essential aspect of the Garment manufacturing process, and for many fashion brands, having a unique print or surface pattern is necessary for brand identity. Textile is in every sector of the fashion industry from wholesale garments to high-end collections. In the Fibre Science course the students study the physical, chemical, biomedical, and engineering properties of fibrous materials, advanced engineering composites, geotextiles, nanofibers and textiles for functional, smart and protective clothing. The scientific study of fibrous materials, builds on foundations in biology, chemistry, engineering, mathematics, and physics. The Students learn the making of various fibers, their chemical, mechanical, biological and physical properties can be controlled. The students also learn to apply the principles of fiber science influence the design and fabrication of traditional and innovative products in the clothing arena. This course orients the students with these concepts related to textiles and fibres.

III. COURSE-LEVEL LEARNING OUTCOMES (CO'S)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

CO1- Analyze the development of textile industries in India.

CO2- Classify different types of the fibres.

CO3- Differentiate between the groups of fiber.

CO4- Apply the yarn spinning process for preparing different types of yarns.

CO5- Select appropriate yarn for fabric development according to end use.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT –

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	elevantCOs
UNIT 1 – TEXTILE INDUSTRIES AND TEXTILE FIBERS (CL Hrs. - 05, Marks -10)				
1.	TLO 1.1 Explain the background of textile industries in Indian context. TLO 1.2 Define the textile terminologies. TLO 1.3 Identify the performances and characteristics of fabrics according to fiber content for various end uses.	1.1 The overview of textile industries in India 1.2 Basic terminology related to fiber and yarn. 1.3 Fabric performance like Aesthetic, Durability, Comfort, Safety and Care and Maintenance Properties	Lecture with media Site/Industry Visit Case Study Collaborative learning Presentations	CO1
UNIT 2 – TEXTILE FIBERS AND PROPERTIES (CL Hrs. - 10, Marks -18)				
2.	TLO 2.1 Classify the given textile fiber based on their origin and chemical nature. TLO 2.2 Identify the source of fibers. TLO 2.3 analyze the fiber properties for various fabrics.	2.1 Composition/Origin of Fibers. 2.2 Sources of fibers from Natural and Man made. 2.3 Fiber Properties of Properties of Cotton, Flax, Hemp, Jute. Properties of Silk, Wool, Mohair. Properties of Viscose Rayon, Lyocell, Acetate. Properties of Polyester, Nylon, Acrylic, Spandex. 2.4 Types of Fiber Properties : 1 Primary - length, flexibility, strength, uniformity 2 Secondary 2.5 Absorbance, hydrophilic and hydrophobic fibres, Elasticity, Abstraction, resistance.	Lecture with media Presentations Case Study Collaborative learning Site/Industry Visit Video Demonstrations	CO3

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT 3 – YARNS AND SPINNING (CL Hrs. - 10, Marks -18)				
3.	TLO 3.1 Identify the Properties and characteristics of yarn TLO 3.2 Selection of yarn TLO 3.1 Identify the Properties and characteristics of yarn TLO 3.2 Selection of yarn for fabrics. TLO 3.3 Apply the concepts Ring Spinning for Spun yarn TLO 3.4 Classification of yarns TLO 3.5 Apply the process of silk reel formation. TLO 3.6 Apply Yarn formation techniques for manmade fibers	3.1 Properties and Characteristics of Yarns depends on- 3.1.1 Count (thickness or fineness) 3.1.2 Number of strands of yarn (single or plied) 3.1.3 Amount of yarn twist 3.1.5 Direction of yarn twist 3.1.5 Basics of Construction of yarn- Base, Effect and Binder Yarn. 3.2 Selection of yarn for fabrics depends on- 3.2.1 Performance expectation of fabric. 3.2.2 End use of fabric (Cotton, Flax, Hemp, Jute. Properties of Silk, Wool, Mohair. Properties of Viscose Rayon, Lyocell, Acetate. Properties of Polyester, Nylon, Acrylic, Spandex.) 3.2.3 Type of fabric-Manmade and Synthetic. 3.3.4 Need or demand of fabric-Overview. 3.3.5 Cost of fabric- Direct, Indirect Cost and Profit. 3.3 Ring Spinning for Spun yarn: 1 Blow room Process 2 Carding 3 Drawing 4 Combing 5 Roving 6 Spinning 3.4 Yarn Formation of Synthetic Yarns- Wet Spinning, Dry Spinning, Melt Spinning 1. Polyester, 2.Nylon, 3. Viscose Rayon 3.5 Introduction to Spun Yarns, Combed Yarns, Woolen Yarns, Worsted Yarns , Filament Yarns 3.6 Sericulture, Thread extraction, Dyeing, Spinning,	Lecture with media Video Demon strat	CO3
UNIT 4 – YARN TYPES AND TWISTS (CL Hrs. - 10, Marks -14)				
4.	TLO 4.1 Analyse the Yarn Quality Parameters TLO 4.2 Identify the types of twists in Yarn TLO 4.3 Analyse the effect of Twist on fabric properties. (degree of yarn twist) TLO 4.4 Apply the yarn formation for fancy /Novelty yarn	4.1 Yarn Quality Parameters : Yarn count/size/fineness: Study of yarn numbering, Types and uses of Yarn Counts, Filament Yarn Count 4.2 Types of twists in Yarn : Amount of yarn twist and end uses. Direction of Yarn Twist - S and Z Single-Ply Yarn , Plied yarn, Core-spun yarn 4.3 Fancy / Novelty Yarns : 1 Texture and aesthetics of novelty yarns. 4.4 Characteristics of novelty yarns. Types of Novelty Yarn: boucle, Brushed / Napped, Chenille, Corkscrew, Nub Spu	Lecture with media Collaborative learning Presentations Video Demonstrations	CO3

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT 5 – FIBER IDENTIFICATION THROUGH FABRIC (CL Hrs. - 10, Marks-10)				
5.	TLO 5.1 Performs of fabric, Identification for ready made fabrics.	5.1 Microscopic view, Burning test-Cotton. Silk, Wool, Rayon, Lyocell, Polyester, Nylon, Acrylic, Spandex.	Lecture with media Collaborative learning Case Study Video Demonstrations	CO2, CO4

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

NOT APPLICABLE

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Check various fibers under a microscope and draw a diagram for fiber identification.
- Make a collection of different types of yarns used for decoration and make a project on the same.
- Develop fiber Classification chart Based on origin of fiber.
- Do a market survey and prepare a report on Indian traditional textile fabrics available in your area Write a report on development of textile industry of India.
- Identify the fiber properties for various fabrics and submit the report.

Assignment

- Make a collection of different type of fabrics using there using their primary and secondary property.
- Prepare the samples of different types of fibers.

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	MICROSCOPE -Image sensor: High-quality HD sensor Video format: AVI Magnification: 90-600 times(continuous) Photo resolution: 280*720P - 4032*3024P Photo format: JPG Video- output interface: USB2.0 Focus range: 4mm to 15mm Frame rate: Max 30f/s under 600 Lux Brightness Storage: Micro-SD card, up to 32G PC support: Yes, for Windows XP/7/8/10 Power source: 5V DC Light source: 8 built-in LED& bottom light source Screen size: 4.3 inches Stand size: 16*10*18cm	All

VIII. SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE
(Specification Table)-

Sr. No	Unit	Unit Title	Aligned COs	Learning Hours	R-Level	U-Level	A-Level	Total Marks
1	I	Textile Industries and Textile fibers.	CO1	5	4	3	3	10
2	II	Textile Fibers and Properties.	CO2	10	6	6	6	18
3	III	Yarns and spinning.	CO3	10	4	6	8	18
4	IV	Yarns types and twist.	CO4	10	4	4	6	14
5	V	Fiber identification through fabric.	CO5	10	2	4	4	10
Grand Total				45	20	23	27	70

IX. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1 Mid term tests 2 Rubrics for Micro Project	1 End of Term Examination

X. SUGGESTED COS- POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO1	1	2	2	-	-	-	-	2	-
CO2	1	-	-	-	-	-	-	-	1
CO3	2	-	-	-	1	1	-	1	-
CO4	2	1	2	-	-	-	1	1	-
CO5	3	-	-	-	2	-	2	1	-

Legends:- High:03, Medium:02, Low:01, No Mapping: - *PSOs are to be formulated at the institute level

XI. SUGGESTED LEARNING MATERIALS/BOOKS

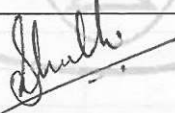
Sr.No	Author	Title	Publisher
1	Barrington Barber	The Fundamentals of Drawing	Barnes and Noble books –New York, 2002

Sr.No	Author	Title	Publisher
2	Angel Fernandez & Gabriel Marketing	Drawing for Fashion designers	Pageone, Singapore
3	Patric John, Ireland	Fashion Design Drawing and presentation	B.T. Batsford, London
4	Anne Allen & Jalian Scaman	Fashion Drawing Basic Principles	B.T. Batsford, London
5	Loan Oei	Elements of Design, Rediscovering colours, Textures, forms & shapes	Thames & Hudson Ltd., London
6	Drudi, Elisabetta 'Kuky'Paci, Tiziana	Figure Drawing For Fashion Design	Amsterdam, The Pepin Press,2010
7	Pankowski, Edith And Pankowski, Dallas	A Programmed Manual - Art Principles In Clothing	New York, The MacmillanCompany, 1972
8	Kathryn Mckelvy.	Fashion Source Book	Blackwell ISBN 10.0632039930
9	Sandra Keiser	Beyond Design	Fairchild Books ISBN 9788160901-226-7
10	Bill Martine.	joy of drawing	ISBN 0-8230-2370-2

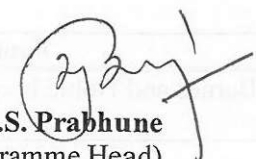
XII. LEARNING WEBSITES & PORTALS

Sr.No	Link/Portal	Description
1.	https://creativemarket.com/blog/20123/12/02/10-basic-elements-of-design , https://www.youtube.co	Elements, Color theory
2.	https://en.wikipedia.org/wiki/Additive_color	Additive Color Theory
3.	https://en.wikipedia.org/wiki/Subtractive_color	Subtractive Color Mixing
4.	https://en.wikipedia.org/wiki/Theory_of_Colours	Colour Theory
5.	http://www.fashionillustrationtribe.com/art-supplies-for-fashion-illustration	Language Of Fashion
6.	https://creativemarket.com/blog/20123/12/02/10-basic-elements-of-design	elements-of-design

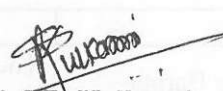
Name & Signature:


Ms. S. M. Waghchaure
 Lecturer in DDGM
 (Course Experts)

Name & Signature:


Mr. S.S. Prabhune
 (Programme Head)

Name & Signature:


Shri. S.B. Kulkarni
 (CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE
'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN DDGM
PROGRAMME CODE	08
COURSE TITLE	COSTUME INSPIRATION
COURSE CODE	DD21202
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks
			Actual Contact Hrs./Week			SLH	NLH			Theory			Based on LL & TSL				Based on SL			
			CL	TL	LL					FA-TH	SA-TH	Total	Practical		SLA					
													FA-PR	SA-PR	Max	Min	Max	Min		
DD21201	COSTUME INSPIRATION	DSC	3		2	1	6	3	03	30	70	100	40	50	20	-	-	25	10	175

Total IKS Hrs. for Semester: 2 Hrs.

Abbreviations: CL-Class Room Learning, TL- Tutorial Learning, LL- Laboratory Learning, SLH- Self Learning Hours, NLH- Notional Learning Hours, FA - Formative Assessment, SA-Summative assessment, IKS – Indian Knowledge System, SLA - Self Learning Assessment

Legends: @ Internal Assessment, # External Assessment, *# OnLine Examination, @\$- Internal Online Examination. Note:

- 1.FA-TH represents an average of two class tests of 30 marks each conducted during the semester.
2. If a candidate does not secure minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
3. If a candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
4. Notional Learning hours for the semester are (CL+LL+TL+SL) hrs.* 15 Weeks
5. 1 credit is equivalent to 30 Notional Hrs.
6. * Self-learning hours shall not be reflected in the Timetable.
7. * Self-learning includes micro-projects/assignments / other activities.

II. RATIONALE:

Clothing has long been used as more than just a way to cover people's bodies. Different types of clothing reveal status, especially in the past but even today, and also the wearers' personalities. As mentioned above, clothing often clearly reveals status and social class. Clothing changes throughout life. People wear different clothes in the cradle, in school, at university, starting work, on special occasions (weddings and funerals), or getting promotions.

When used in its most basic form fashion simply means changing shapes or types of clothing. People have in the past, and today, felt the need to adorn themselves. There has been a noticed influence from different cultures and traditions. There is increasing demand globally for designs inspired by various civilizations and traditional art forms. This study will give insight to students on the inspiration of fashion and culture worldwide which will help them in designing various fashion products needed in industry. This course focuses on the impact of different civilizations on fashion.

III. COURSE-LEVEL LEARNING OUTCOMES (CO's)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

CO1 - Identify the factors and evolution of Indian civilization and its impact on fashion.

CO2 - Create contemporary designs based on traditional costumes of India

CO3 - Demonstrate clothing used in Foreign countries.

CO4 - Compare the Indian costumes with Foreign costumes.

CO5 - Develop innovative costumes based on Indian and Foreign fashion.

THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

Sr. No	Theory Learning Outcomes (TLO'S) aligned to CO's.	Learning content mapped with TLO's.	Suggested Learning Pedagogies	Relevant COs
UNIT 1 – IMPACT OF INDIAN CIVILIZATION ON FASHION (CL Hrs.-9 Marks-18)				
1.	<p>TLO 1.1: Analysis of the Indus Valley Civilization on parameters of Textile/Printing/Embroideries/Costumes/Ornaments and Accessories.</p> <p>TLO 1.2: Differentiate the costumes during Indian, Mauryan, Gupta, Maratha and Mughal Empire.</p> <p>TLO 1.3: Identify the changes during British rule on fashion.</p>	<p>1.1 Study of Indian civilization taking the following pointers- Civilization evolution/Study of Textile/Printing/Embroideries/ Costumes/Ornaments and accessories/its impact on global fashion/ Predicting future impact on the current scenario.</p> <p>1.2 Indus Valley 3300 BCE-1300 BCE</p> <p>1.3 Indian Empire</p> <p>1.3.1 Mayura Empire</p> <p>1.3.2 Gupta Empire</p> <p>1.3.3 Mughal Empire</p> <p>1.3.4 Maratha Empire</p> <p>British Rule and Freedom Struggle.</p>	<p>Lecture with media Lecture with questions and answers</p> <p>Group Discussions</p> <p>Flipped Classroom</p> <p>Demonstration</p>	CO1
UNIT 2 – STUDY OF INDIAN COSTUMES THROUGH DIFFERENT STATES (CL Hrs. - 12, Marks- 20)				
2	<p>TLO 2.1 Identify the unique parameters of male and female costumes in Maharashtra.</p> <p>TLO 2.2 Identify the unique parameters of male and female costumes in Punjab.</p> <p>TLO 2.3 Identify the unique parameters of male and female costumes in Gujarat.</p> <p>TLO 2.4 Identify the unique parameters of male and female costumes in Tamilnadu.</p> <p>TLO 2.5 Differentiate between the Rural and Urban male costumes of Punjab state.</p> <p>TLO 2.6 Differentiate between the Rural and Urban female costumes of Punjab state.</p> <p>TLO 2.7 Identify the different parameters of male costumes in Gujarat.</p> <p>TLO 2.8 Identify the different parameters of female costumes in Gujarat.</p> <p>TLO 2.9 Differentiate between dresses of people from Kutch and Saurashtra. TLO 2.10 Differentiate the</p>	<p>2.1 Male and Female Costume: of Maharashtra, Punjab, Gujarat and Tamilnadu</p> <p>2.1.1 Nomenclature of all the above State</p> <p>2.2 Maharashtra</p> <p>2.2.1 Study of Men's Costume - Dhoti, Sadra, Ganjipharak, Bandi, Pheta.</p> <p>2.2.2 Study of Women's Costume- Sari Drape Sakachcha Nesana and Gol Nesana and Choli.</p> <p>2.3 Punjab</p> <p>2.3.1 Rural and Urban male costume Khes, Tehmed, Kurta, Pajama, Sherwani, churidar and Turban</p> <p>2.3.2 Rural and Urban female costume Salwar, Kameez, Orhani, Ghagra and Kurti.</p> <p>2.4 Gujarat</p> <p>2.4.1 Study of Men's Costume-Dhotiya / Badana Potadi / Paheran / Jabbhoh</p> <p>2.4.2 Study of Women's Costume- Chaniya – Choli, Orhani, and Kancholi.</p> <p>2.4.3 Difference in the dress of people of Kutch and Saurashtra.</p> <p>2.5 Tamilnadu</p> <p>2.5.1 Study of Men's Costume - Dhoti (Panchagachcham, Trikachcham), Komanam, Angavastram</p> <p>2.5.2 Study of women's costume Pavda, 6 and 9 yard Saree</p> <p>2.6 Ornaments -Study of ornaments for all the</p>	<p>Lecture with media</p> <p>Presentations</p> <p>Cooperative Learning</p> <p>Lecture with Q&A Flipped Classroom</p> <p>Demonstration</p> <p>Video</p> <p>Demonstrations</p> <p>Case Study</p> <p>Group discussions</p>	CO2

	costumes/Textile/Ornaments for males and females for the states:- Maharashtra, Punjab, Gujarat, and Tamilnadu (Traditional Costumes).	above states. 2.7 Accessories- Study of accessories for all the above states.		
UNIT 3 – STUDY OF WORLD COSTUMES IN DIFFERENT FOREIGN COUNTRIES(CL Hrs - 14, Marks-20)				
3	<p>TLO 3.1: Identify the unique parameters of male and female costumes in Egypt.</p> <p>TLO 3.2: Identify the unique parameters of male and female costumes in China.</p> <p>TLO 3.3: Identify the unique parameters of male and female costumes in Japan.</p> <p>TLO 3.4: Identify the unique parameters of male and female costumes in Rome.</p> <p>TLO 3.5: Identify the unique parameters of male and female costumes in Greece.</p> <p>TLO 3.6: Analyze the dressing of Egyptian men and women for different age segments.</p> <p>TLO 3.7: Analyze the impact of myths and symbols on dressing of China.</p> <p>TLO 3.8: Differentiate between the traditional practices with the Costumes/Accessories/Ornaments for males and females of Egypt, China, Japan, Roman and Greece countries.</p> <p>TLO 3.9: Ornaments -Enlist the ornaments for all the above countries</p> <p>TLO 3.10: Accessories -Enlist the accessories for all the above countries.</p>	<p>3.1 Male and Female Costume: of Egypt, China, Japan, Rome and Greece.</p> <p>3.1.1 Nomenclature of all the above Countries</p> <p>3.2 Costumes of Egypt</p> <p>3.2.1 Dressing of Men and Women for Old, middle and New Kingdom</p> <p>3.2.2 Men's Clothing: Loin cloth, Shenti, shendot, haik, clothing of the Pharaohs.</p> <p>3.2.3 Women's Clothing: Kalasiris, Sheath dress</p> <p>3.3 Costumes of China</p> <p>3.3.1 Knowledge of certain myths and symbols- The phoenix, The dragon, The Unicorn</p> <p>3.3.2 The costume of Manchu women</p> <p>3.3.3 The costume of Manchu men (Dragon Robe)</p> <p>3.3.4 Mandarin garments</p> <p>3.3.5 Modern day dress The Cheongsam</p> <p>3.4 Greece Clothing:</p> <p>3.4.1 Doric chiton, Tunic, Ionic, Himation, Chalmys and Peplos</p> <p>3.5 Roman Clothing:</p> <p>3.5.1 Toga & its types: Toga picta; Toga virilis; Toga Pratecta; Toga Candida; Toga equites, Toga Picta, Tunic, Palla, Stola, Lacerna, Sabilgaculum</p> <p>3.6 Japan</p> <p>3.6.1 Garments worn by Royal and Common Man's attire</p> <p>3.6.2 Kimono as worn in different forms - Junihitoe, Kosode, Furisode, Yukata, Koshimoki</p> <p>3.6.3 Japanese bridal attire</p> <p>3.6.4 Knowledge of Under Clothes - Hadajuban, Susoyoke, Date-Eri.</p> <p>3.7 Ornaments - Study of ornaments for all the above Countries</p> <p>3.8 Accessories- Study of accessories for all the above Countries</p>	<p>Lecture with Media Presentations Cooperative Learning Video Demonstrations Flipped Classroom</p>	<p>CO3, CO4</p>

UNIT 4 – MODERN VERSION OF FASHION (CL Hrs. - 10, Marks- 12)				
4.	TLO 4.1 Enlist types of upcycleclothing with Indo-Western inspiration. TLO 4.2 Apply “Three Rs” by using above mention inspiration	4.1 Modern Fashion Costume 4.1.1Upcycle Fashion 4.1.2 Organic Textile 4.1.3Sustainable Fashion 4.1.4Celebrity Endorsement	Lecture with media Video Demonstrate on Presentations Flipped Classroom	CO2,CO3, CO4, CO5

IV. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO 1.1 Identify the different dress formsfor Tamilnadu State. LLO 1.2 Choose the appropriate window display method for the given dress form. LLO 1.3 Arrange a window display ofTamilnadu State.	Window Display on the clothing culture of Tamilnadu (Traditional and contemporary with a group of students)	02	CO2,CO4, CO5
2	LLO 2.1 Identify the different dress forms for Andhra Pradesh State. LLO 2.2 Choose the appropriate window display method for the given dress form. LLO 2.3 Showcase a window display ofAndhra Pradesh State.	Window Display on- Clothing Culture of Andhra Pradesh (Traditional and Contemporary Style with group of students)	02	CO2,CO4, CO5
3	LLO 3.1 Identify the different dress formsfor Karnataka State. LLO 3.2 Choose the appropriate window display method for the given dress form. LLO 3.3 Present a window display ofKarnataka State.	Window Display on- Clothing Culture of Karnataka(Traditional and contemporary Style with a group of students)	02	CO2,CO4, CO5
4	LLO 4.1 Identify the different dress formsfor Sikkim State. LLO 4.2 Choose the appropriate window display method for the given dress form LLO 4.3 Arrange a window display ofSikkim State.	Window Display on- Clothing Culture of Sikkim (Traditional and Contemporary Style with group of students)	03	CO2,CO4, CO5

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles / Tutorial Titles	Number of hrs.	Relevant COs
5	LLO 5.1 Identify the different dress forms for Meghalaya and Assam State. LLO 5.2 Choose the appropriate window display method for the given dress form. LLO 5.3 Showcase a window display of Meghalaya and Assam State	Window Display on- the traditional male and female costume of Meghalaya and Assam State (Traditional and Contemporary Style with a group of students)	03	CO2,CO 4,CO5
6	LLO 6.1 Identify the different dress forms for Himachal Pradesh. LLO 6.2 Choose the appropriate window display method for the given dress form. LLO 6.3 Present a window display of Himachal Pradesh.	Window Display on- Clothing Culture of Himachal Pradesh (Traditional and Contemporary Style with group of students)	02	CO2,CO 4, CO5
7	LLO 7.1 Identify the Traditional and Contemporary draping style of Bengali Sari. LLO 7.2 Showcase a window display of Bengali Sari.	Window Display on- Traditional and Contemporary draping style of Bengali Sari with a group of students	02	CO2,CO 4,CO5
8	LLO 8.1 Identify the traditional male and female accessories of Kerala State. LLO 8.2 Identify the traditional male and female ornaments of Kerala State. LLO 8.3 Present a window display on accessories and ornaments of Kerala	Window Display on- the traditional male and female accessories and ornaments of Kerala (Traditional and Contemporary Style with a group of students)	02	CO2,CO 4,CO5
9	LLO 9.1 Identify the parameters of the traditional male costume of the Elizabeth Era. LLO 9.2 Identify the parameters of the traditional female costume of the Elizabeth Era. LLO 9.3 Choose the appropriate window display method for the given dress form. LLO 9.4 Arrange a window display of the Elizabeth Era.	Window Display on- the traditional male and female costume of the Elizabeth Era with a group of students	03	CO3,CO 4,CO5
10	LLO 10.1 Identify the parameters of clothing in Scotland. LLO 10.2 Choose the appropriate window display method for the given dress form. LLO 10.3 Showcase a window display of Scotland's country.	Window display on- Clothing Culture of Scotland with a group of students	03	CO3,CO 4,CO5

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
11	LLO 11.1 Identify the parameters of clothing in Hawaii country. LLO 11.2 Choose the appropriate window display method for the given dress form. LLO 11.3 Present a window display of Hawaii country.	Window Display on- Clothing culture of Hawaii with a group of students	03	CO3,CO 4,CO5
12	LLO 12.1 Identify the parameters of clothing in Indonesia country. LLO 12.2 Choose the appropriate window display method for the given dress form. LLO 12.3 Arrange a window display of Indonesia's country.	The window displays the on clothing culture of Indonesia with a group of students	03	CO3,CO 4,CO5

Note: All the above practical window displays are compulsory and should be performed by a group of three or four students.

V. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Prepare a blog on the “Evolution of costumes” of any two countries.
- Prepare videos on comparison of costumes of foreign and Indian Countries

Assignment

- Collect pictures of ornaments and accessories for any five states in India and prepare a booklet
- Collect the pictures and information about the clothing of any five foreign countries and prepare a booklet.
- Collect the costume pictures from any two movies and study the impact on the fashion market.

VI. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Stackers: Floor stack displayers can come in many materials, including wood, steel, and durable plastic. Durable Injection-molded and Rotational-molded plastic platforms are weatherproof, making them ideal for both interior and exterior display.	All
2	LED Lights to focus display Watt Round LED Button/COB Warm White (Yellow) FocusLight for POP/Recessed Lighting (Set of 4)	All
3	Props according to Indian and Foreign country display.	All

**VII. SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT -
PURPOSE(Specification Table)**

Sr. No	Unit	Unit Title	Aligned COs	Learning Hours	R-Level	U-Level	A-Level	Total Marks
1	I	Impact of Indian Civilization on Fashion	CO1	9	4	4	10	18
2	II	Study of Indian costume through different states	CO2	12	6	6	8	20
3	III	Study of World costumes in different foreign countries.	CO3, CO4	14	6	6	8	20
4	IV	A modern version of fashion	CO2, O3, CO4, O5	10	2	2	8	12
Grand Total				45	18	18	34	70

VIII. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
1. Midterm Test 2. Rubrics for COs Assignment and Micro-project Presentation through window displays	1. End Term Examination (Theory) 2. Lab. Performance-Illustration/Draping

IX. SUGGESTED COs- POs MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO1	1	-	-	1	1	2	-	-	2
CO2	1	1	1	1	1	2	1	-	3
CO3	1	-	-	1	1	2	1	-	1
CO4	1	-	-	-	-	-	1	-	1
CO5	1	1	2	2	2	2	2	-	3

Legends:- High:03, Medium:02, Low:01, No Mapping: -
 *PSOs are to be formulated at the institute level

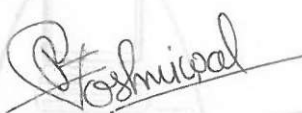
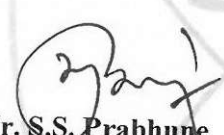
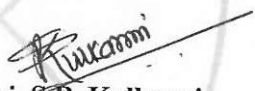
X. SUGGESTED LEARNING MATERIALS/BOOKS

Sr.No	Author	Title	Publisher
1	Linda Lyntan	The Sari	Thames &Hudson LTD, ISBN10:05002 83788
2	Ritu Kumar	Costume & textiles of Royal India	Acc art books, ISBN10:1851495096
3	Janne. B. Eicher	Encyclopedia of World Dress andFashion	Publisher-Berg-2010 ISBN:97818478 83902
4	James Laver	Costume and Fashion	Publisher-Thames and Hudson-2012, 5ISBN:9780500204122
5	Francess Kennet	World Dress	ISBN 1-85732-353-X

XI. LEARNING WEBSITES AND PORTALS

Sr. No	Link/Portal	Description
1.	https://indiashine.net/traditional-clothing-in-india/TraditionalCostume Indian	Indian Traditional Costumes
2.	www.traditionalclothingindia.blogspot.in Tradition clothing of India	Traditional Clothing of India
3.	https://www.historyonthenet.com/egyptian-clothing-clothing Egyptian	Egyptian Clothing
4.	www.sareesafasi.com Knowledge of Saree	Knowledge of Saree
5.	https://www.worldhistory.org/article/1577/clothes-in-the-elizabethan-era/ Elizabeth Clothing Era	Elizabeth Clothing Era
6.	https://en.wikipedia.org/wiki/National_costume_of_Indonesia Indonesia Costume	Indonesia Costume

Sr. No	Link/Portal	Description
7.	https://en.wikipedia.org/wiki/Mekhela_chador Assam Clothing	Assam Clothing
8.	https://consciousfashion.co/guides/india-sustainable-fashion-brands Brand for Sustainable Fashion	The brand for Sustainable Fashion
9.	https://in.search.yahoo.com/search?fr=mcafee&type=E211IN826G0&p=mughal+era+fashion Mughal Era	Mughal Era
10.	https://editorialist.com/fashion/best-british-fashion-brands/ Foreign Fashion Bran	Foreign Fashion Brand

Name & Signature:	
 Mrs. Payal V. Toshniwal Lecturer DDGM (Course Expert)	
Name & Signature:	Name & Signature:
 Mr. S.S. Prabhune (Programme Head)	 Shri. S.B. Kulkarni (CDC In-charge)

GOVERNMENT POLYTECHNIC, PUNE

'120 – NEP' SCHEME

PROGRAMME	DIPLOMA IN CE/EE/ET/ME/MT/CM/IT/DDGM
PROGRAMME CODE	01/02/03/04/05/06/07/08
COURSE TITLE	YOGA AND MEDITATION
COURSE CODE	HU21201
PREREQUISITE COURSE CODE & TITLE	NA

I. LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Course Type	Learning Scheme					Credits	Paper Duration	Assessment Scheme										Total Marks	
			Actual Contact Hrs./Week			SLH	NLH			Theory			Based on LL & TSL				Based on SL				
			CL	TL	LL					FA-TH	SA-TH	Total	Practical		SLA						
						FA-PR	SA-PR						Max	Min	Max	Min					
HU21201	YOGA AND MEDITATION	VEC	-	-	1	1	2	1	-	-	-	-	-	-	25	10	-	-	25	10	50

Total IKS Hrs for Term: 1Hr

Abbreviations: CL-Classroom Learning, TL-Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA- Self Learning Assessment

Legends: @-Internal Assessment, # - External Assessment,*# - Online Examination,@\$ - Internal Online Examination

Note:

FA-TH represents an average of two class tests of 30 marks each conducted during the semester.

1. If a candidate is not securing minimum passing marks in FA-PR (Formative Assessment - Practical) of any course, then the candidate shall be declared as 'Detained' in that semester.
2. If a candidate does not secure minimum passing marks in SLA (Self Learning Assessment) of any course, then the candidate shall be declared as 'fail' and will have to repeat and resubmit SLA work.
3. Notional learning hours for the semester are (CL + LL + TL + SL) hrs. * 15 Weeks
4. 1 credit is equivalent to 30 Notional hours.
5. * Self-learning hours shall not be reflected in the Timetable.
- 6.* Self-learning includes micro-projects/assignments/other activities.

II. RATIONALE:

Diploma Graduate needs a sound body and mind to face the challenging situations in a career as an employee or as an entrepreneur. Yoga and Meditation bring about the holistic development of an individual and equip him with the necessary balance to handle the challenges. The age of polytechnic students is appropriate to get introduced to yoga practice as this will help them in their studies as well as their professional lives. Moreover, Yoga inculcates discipline in all walks of the life of students. Pranayama practice regulates the breathing practices of the student to improve stamina and resilience.

Meditation empowers a student to focus and keep calm to get peace of mind. World Health Organization (WHO) has also emphasized the role of yoga and meditation as stress prevention measures. National Education Policy 2020 highlights the importance of yoga and meditation amongst students of all ages. Therefore, this course for Diploma students is designed for the overall well-being of the student and aims to empower students to adopt and practice "Yoga" in daily life.

III. COURSE-LEVEL LEARNING OUTCOMES (CO'S)

Students will be able to achieve & demonstrate the following CO's on completion of course-based learning

CO1 - Practice basic Yoga and Pranayama in daily life to maintain physical and mental fitness.

CO2 - Practice meditation regularly to improve concentration and better handling of stress and anxiety.

CO3 - Follow a healthy diet and hygienic practices for maintaining good health.

IV. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

NOT APPLICABLE

V. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL/TUTORIAL EXPERIENCES.

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
1	LLO 1.1 Practice warming up for Yoga.	Introduction:- Presentations on Introduction to Yoga and its History. Lab Exp: 1. Perform warming-up exercises to prepare the body from head to toe for Yoga.	5	CO1
2	LLO 2.1 Practice Surya Namaskar	Lab Exp: 2. Perform all the postures of Surya Namaskar one by one at a very slow pace, after warm-up. Lab Exp 3. Perform multiple Surya Namaskar (Starting with three and gradually increasing it to twelve) in one go. Experiments 2 to 4 must be followed by Shavasana for self-relaxation.	7	CO1, CO2
3	LLO 3.1 Practice basic Asanas	Lab Exp: 4 Perform Sarvangasna, Halasana, Kandharasana (setubandhasana) Lab Exp: 5 Perform Bhujangasana, Naukasana, Mandukasana Lab Exp: 6 Perform Paschimottasana, Baddhakonasana, Bharadwajasana. Lab Exp: 7 Perform Veera Bhadrasana, Vrukshasana, Trikonasana. Follow-up experiments 5 to 7 with Shavasana for self-relaxation	8	CO2
4	LLO 4.1 Practice basic Pranayama	Lab Exp: 8 Perform Bhastrika, Anulom Vilom Pranayam Kriya Lab Exp: 9 Practice Kapalbhati Pranayam Kriya Lab Exp: 10 Practice Bhramary Pranayam.	5	CO3

Sr. No	Practical/Tutorial/Laboratory Learning Outcome (LLO)	Laboratory Experiment / Practical Titles /Tutorial Titles	Number of hrs.	Relevant COs
5	LLO 5.1 Practice Meditation	Lab Exp: 11 Perform sitting in Dhyan Mudra and meditating. Start with five minutes and slowly increasing to higher durations. The trainer will explain the benefits of Meditation before practice	5	CO3

Note :

1. The start and end of each session can be with appropriate Yoga prayers and chanting of Omkar.
2. Trainers can add similar asanas in practical sessions.
3. Students are to be instructed to practice the experiment performed at least twice a week as part of self learning practices.
4. A live demonstration by the trainer needs to be carried out during practical hours. Yogic Videos can be used as well.

VI. SUGGESTED MICRO PROJECT/ASSIGNMENT/ACTIVITIES FOR SPECIFIC LEARNING/SKILLS DEVELOPMENT (SELF-LEARNING)

Micro project

- Maintain a diary indicating date-wise practice done by the student with a photograph of self in yogic posture.

Assignment

- Prepare a Diet and nutrition chart for Self.

Learning

- Practice at least thrice a week.
- Read books on different methods to maintain health, and wellness and to enhance mood.
- Watch videos on Yoga Practices.

VII. LABORATORY EQUIPMENT/INSTRUMENTS/TOOLS/SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Yoga and Meditation kits : Yoga Mats, Yoga Rollers, Yoga Blocks, Aero Yoga Clothing Blankets, Cloth Straps, Bolsters Wheels	ALL

VIII. SUGGESTED FOR WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table)

NOT APPLICABLE

IX. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)	Summative Assessment (Assessment of Learning)
Lab performance, Self-learning and Terms work	Actual Practical Performance

X. SUGGESTED COS- POS MATRIX FORM

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes *(PSOs)		
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2	PSO-3
CO1	-	-	-	-	3	-	-			
CO2	-	-	-	-	3	-	-			
CO3	-	-	-	-	3	-	-			
CO4	-	-	-	-	3	-	-			
CO5	-	-	-	-	3	-	-			


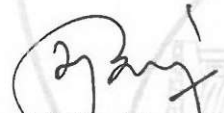
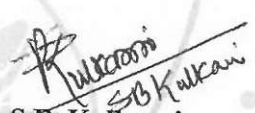
Legends:- High:03, Medium:02, Low:01, No Mapping: -
 *PSOs are to be formulated at the institute level

XI.SUGGESTED LEARNING MATERIALS/BOOKS

Sr.No.	Author	Title	Publisher
1	Swami Vivekananda	Patanjalis Yoga Sutras	Fingerprint Publishing (2019) ISBN-10 9389567351
2	Luisa Ray (Author), Angus Sutherland (Illustrator)	Yoga for Every Body: A beginner's guide to the practice of yoga postures, breathing exercises and meditation.	Vital Life Books (2022) ISBN-13: 9781739737030, ISBN-10: 1739737032
3	Swami Saradananda	Mudras for Modern Life: Boost your health, re-energize your life, enhance your yoga and deepen your meditation	Watkins Publishing ISBN: 9781780289984, Edition: 2018
4	Martha Davis, Elizabeth Robbins, Matthew McKay, Eshelman MSW	The Relaxation and Stress Reduction Workbook	A New Harbinger Self-Help Workbook (2019)
5	SWANSON, ANN	Science of Yoga: Understand the Anatomy and Physiology to Perfect Your Practice	Penguin Random House, ISBN 13 9780241341230

XIII. LEARNING WEBSITES & PORTALS

Sr.No	Link/Portal	Description
1.	https://onlinecourses.swayam2.ac.in/aic19_ed28/preview	Introduction to Yoga and Applications of Yoga - Course (swayam2.ac.in)
2.	https://onlinecourses.swayam2.ac.in/aic23_review	Yoga for Creativity
3.	https://onlinecourses.swayam2.ac.in/aic23_ge05/preview	Yoga for concentration
4.	https://onlinecourses.swayam2.ac.in/aic23_ge06/preview	Yoga for Memory Development
5.	https://onlinecourses.nptel.ac.in/noc21_hs29/preview	Psychology of Stress, Health and Well-being
6.	https://onlinecourses.swayam2.ac.in/nce19_sc04/preview	Food Nutrition for Healthy Living

Name & Signature:	
 Date (S.P. Date) (Course Experts)	
Name & Signature:	Name & Signature:
 Mr. S.S. Prabhune (Programme Head)	 Shri. S.B. Kulkarni (CDC In-charge)