

Program Name : Diploma in Dress Designing & Garment Manufacturing
Program Code : DD
Semester : Second
Course Title : Garment Technology – Women’s Wear
Course Code : 24207

1. RATIONALE:

Students will be able to overcome practical problems in manufacturing of Women’s Wear. Flat fabrics need to be given shape according to the body contours hence study of principles of dart manipulation, and draping becomes imperative. As body types vary, paper patterns need to be modified according to figures. At times, advanced techniques of added fullness, are used which adds grace and beauty to the design.

2. COMPETANCY:

The aim of this course is to help the students to attain the following industry identified competency through various teaching learning process.

- **Draft patterns using appropriate principles of Garment Construction for Women’s Wear (Woven & Knits).**

3. COURSE OUTCOMES (Cos):

The student can acquire following industry-oriented CO’s associated with the above mentioned competency.

- Construct bodice with its components using pattern making principles and techniques.
- Construct lower garment using different principles and techniques of pattern making.
- Grade patterns manually and with CAD.
- Construct advanced garments, analyse the fit and rectify problems.

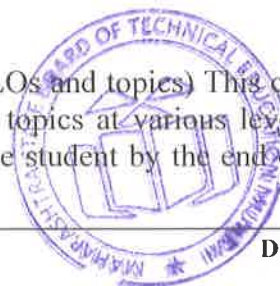
4. TEACHING AND EXAMINATION SCHEME :

Teaching Scheme			Credit (L+T+P)	Examination Scheme												
L	T	P		Theory						Practical						
				Paper Hrs.	ESE		PA		Total		ESE		PA		Total	
				Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	2	6	10	2	35	14	15*	00	50	20	50#	20	50	20	100	40

(*): Under the theory PA, Out of 30 marks, 10 marks are for micro-project assessment to facilitate integration of COs and the remaining 20 marks is the average of 2 tests to be taken during the semester for the assessment of the cognitive domain UOs required for the attainment of the COs.

Legends: L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P - Practical; C – Credit, ESE - End Semester Examination; PA - Progressive Assessment

- COURSE MAP** (with sample COs, Learning Outcomes i.e. LOs and topics) This course map illustrates an overview of the flow and linkages of the topics at various levels of outcomes (details in subsequent sections) to be attained by the student by the end of the



course, in all domains of learning in terms of the industry/employer identified competency depicted at the centre of this map.

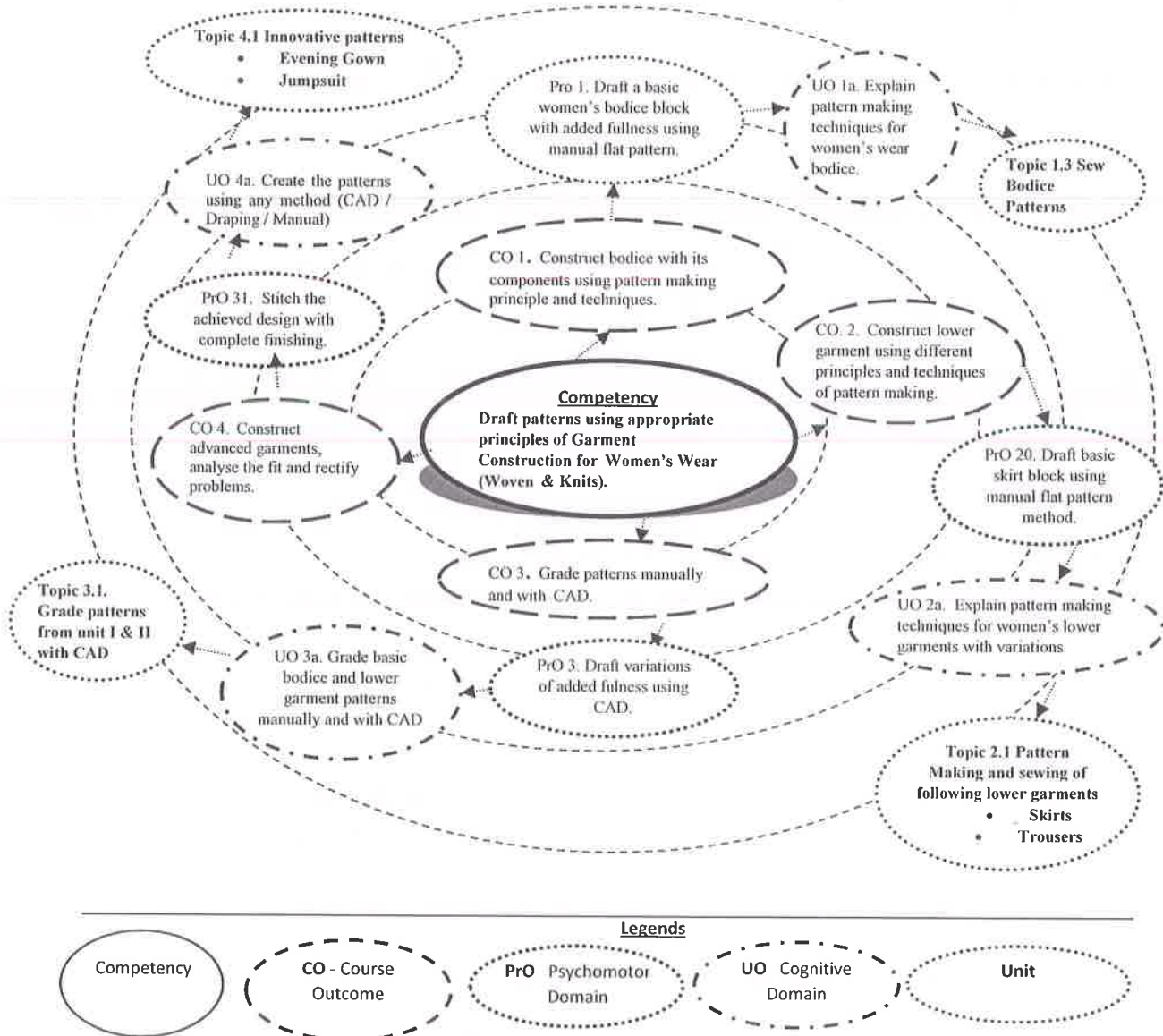


Figure 1 - Course Map

6. SUGGESTED PRACTICALS / EXERCISES :

The practicals in this section are POs (i.e. sub components of the Cos) to be developed and assessed in the student for the attainment of the competency.

S. No.	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. Required
1	Draft a basic women’s bodice block with added fullness using manual flat pattern method	I	2 Hrs
2	Draft a basic women’s bodice block and apply the principle of added fullness using CAD	I	2 Hrs
3	Draft variations of added fulness using CAD	I	2 Hrs
4	Apply seam allowance, write piece information & trace pieces using CAD	I	2 Hrs



5	Grade the above pieces using CAD	III	2 Hrs
6	Prepare a dummy, along with the fabric for draping	I	2 Hrs
7	Practice another pattern on draping with principle of added fulness	I	2 Hrs
8	Transfer the toile on to pattern, show the shifting of dart for added fulness	I	2 Hrs
9	Mark seam allowance and write piece information	I	2 Hrs
10	Stitch the above pattern without finishing	I	2 Hrs
11	Develop a bodice block using the contouring guidelines (manual method)	I	2 Hrs
12	Develop a bodice block using the contouring guidelines with CAD	I	2 Hrs
13	Develop variations like corset/katori blouse etc using CAD	I & IV	2 Hrs
14	Apply seam allowance, write piece information & trace pieces using CAD	I	2 Hrs
15	Grade the above pieces using CAD	III	2 Hrs
16	Prepare a dummy, along with the fabric to learn the contouring principle	I	2 Hrs
17	Drape a pattern with the contouring principle to achieve a corset	I	2 Hrs
18	Transfer the toile on to Pattern paper	I	2 Hrs
19	Cut and stitch the achieved design without finishing	I	2 Hrs
20	Draft basic skirt block using manual flat pattern method	II	2 Hrs
21	Draft basic skirt block using CAD	II	2 Hrs
22	Draft variations of the skirt: straight, A-Line, fitted, pencil, Fish tail etc. using CAD	II	2 Hrs
23	Apply seam allowance, write piece information & trace pieces of any one using CAD	II	2 Hrs
24	Grade the above pieces using CAD	III	2 Hrs
25	Prepare a dummy, along with the fabric to learn draping of a skirt	II	2 Hrs
26	Drape any one variation practiced in CAD	II	2 Hrs
27	Remove from the dummy, mark seam allowance and stitch the achieved design without finishing	II	2 Hrs
28	Drape advanced patterns combining bodice and skirt variation to achieve a dress/gown with neckline and sleeve variation	IV	2 Hrs
29	Transfer the toile to pattern paper	IV	2 Hrs
30	Cut the above design on desired fabric	IV	2 Hrs
31	Stitch the achieved design with complete finishing	IV	2 Hrs
32	Stitch the achieved design with complete finishing	IV	2 Hrs



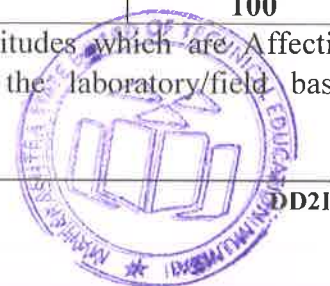
33	Stitch the achieved design with complete finishing	IV	2 Hrs
34	Stitch the achieved design with complete finishing	IV	2 Hrs
35	Analyse various problems related to the fit of a bodice and dress and learn the remedies for it	IV	2 Hrs
36	Draft a basic culotte using flat pattern manual method	II	2 Hrs
37	Draft a basic culotte pattern and its variations with CAD	II	2 Hrs
38	Draft a basic trouser using flat pattern manual method	II	2 Hrs
39	Prepare a basic trouser and its variations with CAD	II	2 Hrs
40	Cut any one of the above trouser patterns on muslin fabric	II	2 Hrs
41	Stitch the above trouser pattern without finishing	II	2 Hrs
42	Grade the any of the above pattern using CAD	III	2 Hrs
43	Draft advanced patterns combining bodice & trouser / culotte with neckline and sleeve variation to achieve a Jumpsuit	IV	2 Hrs
44	Cut the above design on desired fabric	IV	2 Hrs
45	Stitch the achieved design with complete finishing	IV	2 Hrs
46	Stitch the achieved design with complete finishing	IV	2 Hrs
47	Stitch the achieved design with complete finishing	IV	2 Hrs
48	Stitch the achieved design with complete finishing & Analyse various problems related to fit and learn the remedies for it	IV	2 Hrs
Total			96

Note

- i. A suggestive list of PrOs is given in the above table. More such PrOs can be added to attain the COs and competency. A judicious mix of minimum 24 or more practical need to be performed, out of which, the practicals marked as ‘*’ are compulsory, so that the student reaches the ‘Application Level’ of Bloom’s Taxonomy’ as generally required by the industry.
- ii. The ‘Process’ and ‘Product’ related skills associated with each PrO are to be assessed according to a suggested sample given below:

Sr. No.	Performance Indicators	Weightage in %
1	Drafting patterns with Manual flat pattern method	10
2	Drafting patterns with Draping	20
3	Drafting patterns with CAD	20
4	Cutting, Stitching & fitting analysis of variations in toiles	20
5	Drafting, Cutting, Stitching & Finishing of combination garments	30
Total		100

The above PrOs also comprise of the following social skills/attitudes which are Affective Domain Outcomes (ADOs) that are best developed through the laboratory/field based experiences:



- a. Follow safety practices.
- b. Practice good housekeeping.
- c. Demonstrate working as a leader/a team member.
- d. Maintain tools and equipments.
- e. Follow ethical Practices.

The ADOs are not specific to any one PrO, but are embedded in many PrOs. Hence, the acquisition of the ADOs takes place gradually in the student when s/he undertakes a series of practical experiences over a period of time. Moreover, the level of achievement of the ADOs according to Krathwohl’s ‘Affective Domain Taxonomy’ should gradually increase as planned below:

- ‘Valuing Level’ in 1st year
- ‘Organizing Level’ in 2nd year
- ‘Characterizing Level’ in 3rd year.

7. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment/Instruments/Other resources name with Broad Specifications	PrO. No.
1.	Standard dummies	All
2.	Cutting Tables Sewing machines Overlock machines Measuring Tools – Scale Triangle, measuring tape, flexi tape, French curve. Tracing Tools – Tailors Chalk Tracing paper, Carbon Paper, Tracing wheel. Cutting Tools – Scissors, Shears, Pinking Shears	All
3.	Stationary material such as pencil, eraser, scale, Brown Paper Drafting Book (Journal)	All
4.	Computer with CAD & Printer	Wherever applicable.

8. UNDERPINNING THEORY COMPONENTS

The following topics / subtopics are to be taught and assessed in order to develop UOs achieving the COs to attain the identified competency.

Unit	Unit Outcomes (UOs) (in cognitive domain)	Topics and Sub-topics
Unit – I Bodice (Manual, Draping & CAD)	1a. Explain pattern making techniques for women’s wear bodice. 1b. Choose neck and sleeve variation for relevant patterns. 1c. Assemble bodice components.	1.1 Pattern making & Sewing of bodice patterns with <ul style="list-style-type: none"> • Added fullness • Contouring (Corset, Katori blouse etc) 1.2 Pattern components <ul style="list-style-type: none"> • Neck variation (Off Shoulder dress, Boat, cowl halter etc.)

		<ul style="list-style-type: none"> Sleeve variations (inset, cap Bell, Puff, Bishop etc)
Unit – II Lower Garments (Manual, Draping & CAD)	2a. Explain pattern making techniques for women’s lower garments with variations 2b. Develop patterns with different components.	1.3 Sew Bodice Patterns 2.1 Pattern Making and sewing of following lower garments <ul style="list-style-type: none"> Skirts (flared, fitted, pencil, fish tail, gored, with basque gathers, frills, tiers etc) Trousers (Culottes, pleated, shorts, flared etc.)
Unit– III Grading	3a. Grade basic bodice and lower garment patterns manually and with CAD	3.1 Grade patterns from unit I & II with CAD
Unit– IV Advanced Garments	4a. Create the patterns using any method (CAD / Draping / Manual) 4b. Choose finishes according to design 4c. Analyse & rectify fit problems of women’s wear	4.1 Innovative patterns <ul style="list-style-type: none"> Evening Gown Jumpsuit 4.2 Apply appropriate finishes 4.2 Analyse fit problems associated with women’s garments & learn remedies for the same

Note: To attain the COs and competency, above listed UOs need to be undertaken to achieve the ‘Application Level’ and above of Bloom’s ‘Cognitive Domain Taxonomy’

9. SUGGESTED SPECIFICATION TABLE FOR QUESTIONN PAPER DESIGN

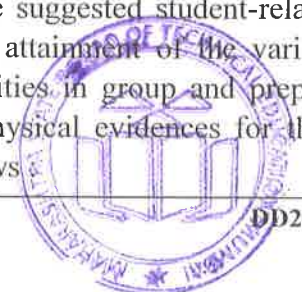
Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Bodice (Manual, Draping & CAD)	38	2	4	8	14
II	Lower garment(Manual, Draping & CAD)	28	2	4	8	14
III	Grading	08	2	2	--	04
IV	Advanced Garments	30	--	--	3	03
	Total	104	06	10	19	35

Legends: R=Remember, U=Understand, A=Apply and above (Bloom’s Revised taxonomy)

Note: This specification table provides general guidelines to assist student for their learning and to teachers to teach and assess with respect to attainment of LOs. The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may vary from above table.

10. SUGGESTED STUDENT ACTIVITIES

Other than the classroom and laboratory learning, following are the suggested student-related co-curricular activities which can be undertaken to accelerate the attainment of the various outcomes in this course : Students should conduct following activities in group and prepare reports of about 5 pages for each activity, also collect / record physical evidences for their (student’s) portfolio which will be useful for their placement interviews



- a. Student should maintain a notebook where all the new terminologies which are used in the pattern making and grading will be noted with meanings and sketches/figures.
- b. Students have to maintain a journal for documentation of pattern making with various method.
- c. Students will draw sketches of samples and report them to teacher.

11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course :

- a. Massive open online courses (MOOCs) may be used to teach various topics / sub-topics.
- b. Emphasis of practicals should be on learning more creative patterns.
- c. Different types of teaching methods and media that are to be employed to develop the outcomes.
- d. Above 15-20 % of the topics / sub-topics which is relatively simpler or descriptive in nature is to be given to the students for self-directed learning and assess the development of the COs through classroom presentations (see implementation guidelines for details).
- e. Teachers need to ensure to create opportunities and provisions for co-curricular activities.
- f. Guide student(s) in undertaking micro-projects.
- g. Assembling of patterns pieces should be using kora fabrics without any finishing except for two term garments.

12. SUGGESTED MICRO-PROJECTS

Only one micro-project is planned to be undertaken by a students that needs to be assigned to him/her in the beginning of the semester. In the first four semesters, the micro-project are group-based. However, in the fifth and sixth semesters, it should be preferably be individually undertaken to build up the skill and confidence in every student to become problem solver so that s/he contributes to the projects of the industry. In special situations where groups have to be formed for micro-projects, the number of students in the group should not exceed three. The micro-project could be industry application based, internet-based, workshop-based, laboratory-based or field-based . Each micro-project should encompass two or more COs which are in fact, an integration of PrOs, UOs and ADOs. Each student will have to maintain dated work diary consisting of individual contribution in the project work and give a seminar presentation of it before submission. The total duration of the micro-project should not be less than 16 (sixteen) student engagement hours during the course. The student ought to submit micro-project by the end of the semester to develop the industry oriented COs.

A suggestive list of micro-projects are given here. Similar micro-projects could be added by the concerned faculty :

1. **Fitting Analysis:** The teacher will assign one human figure and the students will analyse the figure and suggest required alterations in pattern making for various garments.
2. **Dart Conversion:** Students will modify the patterns using conversion of darts into seams, pleats and tucks.
3. **Picture Collection:** Collect pictures for different human figures.



13. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication & ISBN No.
1.	Pattern Making for Fashion Design	Helen Joseph Armstrong	Harper Collins, LA, 2009, ISBN-9789332518117
2.	Patternmaking For Fashion Design	Joseph-Armstrong, Helen	New Delhi, Pearson India Education Services Pvt. Ltd., 2016 ISBN-9780060403324
3.	Metric Pattern Cutting For Women's Wear	Aldrich, Winifred	Uk, Blackwell Publishing, 2008 ISBN-9788126548415
4.	The Art Of Fashion Draping	Amaden-Crawford, Connie	New Delhi, Om Books International, 2005 ISBN-9788187107354
5.	Draping Basics	Di Marco, Sally M.	New York, Fairchild Books, 2010 ISBN-9781563677366
6.	Draping For Fashion Design	Jaffe, Hilde Relis, Nurie Torre, Rosemary - Illustrator	New Jersey, Pearson Education Inc., 2005 ISBN-9780132447270

14. SUGGESTED SOFTWARE / LEARNING WEBSITES :

- <https://www.dresspatternmaking.com/principles/added-fullness>
- <https://fabrickated.com/2016/06/17/the-contour-guide-pattern-how-to-make-one/>
- <https://www.evidhya.com/tutorials/tutorials.php?qid=771>
- https://www.youtube.com/watch?v=MND0y1R4_nM
- <https://www.youtube.com/watch?v=BhG9Sp3UutI>

